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                  prophetic substances
 NEWS  4  JAN 28  USPATFULL, USPAT2, and USPATOLD enhanced with new
                  custom IPC display formats
 NEWS  5  JAN 28  MARPAT searching enhanced
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 NEWS  7  JAN 28  TOXCENTER enhanced with reloaded MEDLINE segment
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 NEWS 12  FEB 25  IMSPRODUCT reloaded with enhancements
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                  U.S. National Patent Classification
 NEWS 14  MAR 31  IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                  IPC display formats
 NEWS 15  MAR 31  CAS REGISTRY enhanced with additional experimental
                  spectra
 NEWS 16  MAR 31  CA/CAplus and CASREACT patent number format for U.S.
                  applications updated
 NEWS 17  MAR 31  LPCI now available as a replacement to LDPCI
 NEWS 18  MAR 31  EMBASE, EMBAL, and LEMBASE reloaded with enhancements
 NEWS 19  APR 04  STN AnaVist, Version 1, to be discontinued
 NEWS 20  APR 15  WPIDS, WPINDEX, and WPIX enhanced with new
                  predefined hit display formats
 NEWS 21  APR 28  EMBASE Controlled Term thesaurus enhanced
 NEWS 22  APR 28  IMSRESEARCH reloaded with enhancements
 NEWS 23  MAY 30  INPAFAMDB now available on STN for patent family
                  searching
 NEWS 24  MAY 30  DGENE, PCTGEN, and USGENE enhanced with new homology
                  sequence search option
 NEWS 25  JUN 06  EPFULL enhanced with 260,000 English abstracts
 NEWS 26  JUN 06  KOREAPAT updated with 41,000 documents
 NEWS 27  JUN 13  USPATFULL and USPAT2 updated with 11-character
                  patent numbers for U.S. applications
 NEWS 28  JUN 19  CAS REGISTRY includes selected substances from
                  web-based collections
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 NEWS 29  JUN 25  CA/CAplus and USPAT databases updated with IPC
                  reclassification data

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE COVERS 1907 - 27 Jun 2008  VOL 149 ISS 1
FILE LAST UPDATED: 26 Jun 2008  (20080626/ED)

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reclassification data for the second quarter of 2008.

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           65 808752-25-2
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             0 808752-25-2D
L1           65 808752-25-2/RN
                (808752-25-2 (NOTL) 808752-25-2D )

=> d l1

L1   ANSWER 1 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2008:669530  CAPLUS <<LOGINID::20080627>>
DN   149:21046
TI   Chemically amplified far-UV positive photoresist compositions, and their
     patterning method
IN   Saegusa, Hiroshi
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 69pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   JP 2008129343        A     20080605    JP 2006-314466         20061121
PRAI JP 2006-314466              20061121


=> d l1 not 1
'NOT' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

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ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
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OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

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FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
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L1   ANSWER 1 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2008:669530  CAPLUS <<LOGINID::20080627>>
DN   149:21046
ED   Entered STN:  05 Jun 2008
TI   Chemically amplified far-UV positive photoresist compositions, and their
     patterning method
IN   Saegusa, Hiroshi
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 69pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
CC   74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   JP 2008129343        A     20080605    JP 2006-314466         20061121
PRAI JP 2006-314466               20061121
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
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 JP 2008129343    IPCI   G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027
                         [I,A]; H01L0021-02 [I,C*]
                  FTERM  2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC04;
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2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BF03;
2H025/BF15; 2H025/BG00; 2H025/CC20; 2H025/FA12;
2H025/FA17

AB The photoresist compns. contain (A) resins which decomp. by acid action and increase soly. in alk. developers, (B) photoacid generators, and (C) nonpolymeric compds. which decomp. and release hydroxy or ether compds. by acid action and increase soly. in alk. developers. The compns. can provide sharp edge patterns with .ltoreq.100 nm width regardless of the degree of d. or isolation of the patterns.

ST far UV pos photoresist photoacid sensitive dissoln accelerator

IT Positive photoresists
(far-UV; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 258879-87-7P, .gamma.-Butyrolactone methacrylate-3-hydroxyadamantyl 1-methacrylate-2-methyl-2-adamantyl methacrylate copolymer 340964-38-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 610300-93-1 690258-44-7 738590-44-8 870450-71-8 903905-37-3
926668-17-9 929197-01-3 935536-42-8 938173-86-5 1026792-33-5
RL: TEM (Technical or engineered material use); USES (Uses)
(chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 19800-27-2 1029101-00-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of photoacid-sensitive carboxy compd.-releasing dissoln. accelerators for pos. photoresists)

IT 144317-44-2 209482-18-8 241806-75-7 284474-28-8 474516-38-6
680200-03-7 ***808752-25-2*** 852572-15-7 863024-59-3
879180-00-4
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)
(photoacid generators; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 1029100-94-4P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(photoacid-sensitive dissoln. accelerators; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 1029100-90-0 1029100-91-1 1029100-92-2 1029100-93-3 1029100-95-5
1029100-96-6 1029100-97-7 1029100-98-8 1029100-99-9 1029101-01-6
RL: MOA (Modifier or additive use); USES (Uses)
(photoacid-sensitive dissoln. accelerators; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

=> d l1 1-65

L1 ANSWER 1 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:669530 CAPLUS <<LOGINID::20080627>>
DN 149:21046
TI Chemically amplified far-UV positive photoresist compositions, and their patterning method
IN Saegusa, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008129343	A	20080605	JP 2006-314466	20061121
PRAI	JP 2006-314466		20061121		

L1 ANSWER 2 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:609501 CAPLUS <<LOGINID::20080627>>
DN 148:572489
TI Positively working photosensitive resin compositions, esters, and their nanometer-sized pattern formation
IN Saegusa, Hiroshi; Kodama, Kunihiko; Tsubaki, Hideaki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 60pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008116720	A	20080522	JP 2006-300263	20061106
PRAI	JP 2006-300263		20061106		

L1 ANSWER 3 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:549081 CAPLUS <<LOGINID::20080627>>
DN 148:526570
TI Positive-working photosensitive composition and method of forming pattern
IN Yamaguchi, Shuhei; Kodama, Kunihiko; Tsubaki, Hideaki; Taguchi, Norihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008107793	A	20080508	JP 2007-214913	20070821
PRAI	JP 2006-260430	A	20060926		

L1 ANSWER 4 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:471036 CAPLUS <<LOGINID::20080627>>
DN 148:437348
TI Radiation-sensitive resists for liquid immersion lithography, their acid generators, and preparation thereof
IN Nagai, Tomoki
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 25pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008089777	A	20080417	JP 2006-268488	20060929
PRAI	JP 2006-268488		20060929		

L1 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:447243 CAPLUS <<LOGINID::20080627>>
DN 148:459637
TI Positive-working photosensitive composition and method of forming pattern using the same
IN Kodama, Kunihiko; Tsubaki, Hideaki; Taguchi, Norihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 50pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008083159	A	20080410	JP 2006-260432	20060926
PRAI	JP 2006-260432		20060926		

L1 ANSWER 6 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:419172 CAPLUS <<LOGINID::20080627>>
DN 148:414272
TI Resist composition and pattern forming method using the same
IN Tsuchihashi, Toru; Nishiyama, Fumiyuki; Makino, Masaomi; Mizutani, Kazuyoshi
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 50pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1906240	A2	20080402	EP 2007-18265	20070918
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2008089790	A	20080417	JP 2006-268604	20060929
	US 20080081292	A1	20080403	US 2007-863314	20070928
PRAI	JP 2006-268604	A	20060929		

L1 ANSWER 7 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:315822 CAPLUS <<LOGINID::20080627>>
DN 148:318679
TI Manufacture of polymers by chain-transfer reaction, their positively working resist compositions and pattern formation, and compounds for chain-transfer agents
IN Kaneko, Yushi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 58pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008056810	A	20080313	JP 2006-235617	20060831
PRAI	JP 2006-235617		20060831		

L1 ANSWER 8 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:124303 CAPLUS <<LOGINID::20080627>>
DN 148:202132
TI Positive resist composition and method of forming resist pattern
IN Mimura, Takeyoshi; Kawaue, Akiya; Takasu, Ryoichi
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 65pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008012999	A1	20080131	WO 2007-JP61648	20070608
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2008026725	A	20080207	JP 2006-201008	20060724
	JP 2008032839	A	20080214	JP 2006-203629	20060726
	JP 2008032840	A	20080214	JP 2006-203630	20060726
PRAI	JP 2006-201008	A	20060724		
	JP 2006-203629	A	20060726		
	JP 2006-203630	A	20060726		

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 9 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:91953 CAPLUS <<LOGINID::20080627>>
DN 148:155419
TI Resist polymers and their manufacture, resist compositions with improved resolution and exposure latitude, positive or negative resist compositions, and pattern formation
IN Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008013733	A	20080124	JP 2006-189266	20060710
PRAI	JP 2006-189266		20060710		

L1 ANSWER 10 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1420660 CAPLUS <<LOGINID::20080627>>
DN 148:66139

TI Positive photoresist compositions, method for forming patterns therewith, and resins and monomers therefor
IN Saegusa, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 50pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007322660	A	20071213	JP 2006-151869	20060531
PRAI	JP 2006-151869		20060531		

L1 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1177670 CAPLUS <<LOGINID::20080627>>
DN 147:469889
TI Fluorine-containing polymer, purification method, and radiation-sensitive resin composition
IN Nakagawa, Hiroki; Nakashima, Hiromitsu; Wakamatsu, Gouji; Harada, Kentarou; Nishimura, Yukio; Shioya, Takeo
PA JSR Corporation, Japan
SO PCT Int. Appl., 86pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007116664	A1	20071018	WO 2007-JP56094	20070323
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI	JP 2006-99889	A	20060331		
	JP 2006-165310	A	20060614		
	JP 2006-247299	A	20060912		
	JP 2007-10765	A	20070119		

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 12 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1149360 CAPLUS <<LOGINID::20080627>>
DN 147:458853
TI Radiation-sensitive positive resist compositions forming patterns with minimized line edge roughness and etching resistance
IN Shimizu, Daisuke; Matsumura, Shinji
PA Jsr Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54pp.

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007264051	A	20071011	JP 2006-85513	20060327
PRAI	JP 2006-85513		20060327		

OS MARPAT 147:458853

L1 ANSWER 13 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1115232 CAPLUS <<LOGINID::20080627>>
DN 147:436848
TI Positive photoresists and their patterning with minimum line-edge roughness and without collapse
IN Yoshida, Yuko; Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007256640	A	20071004	JP 2006-81054	20060323
PRAI	JP 2006-81054		20060323		

L1 ANSWER 14 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1115051 CAPLUS <<LOGINID::20080627>>
DN 147:436845
TI Positive resist composition and patterning method
IN Morita, Kensuke; Makino, Masaomi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007256347	A	20071004	JP 2006-77244	20060320
PRAI	JP 2006-77244		20060320		

L1 ANSWER 15 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1089208 CAPLUS <<LOGINID::20080627>>
DN 147:416410
TI Positive-working photosensitive composition and patterning method
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 39pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007249024	A	20070927	JP 2006-75066	20060317

PRAI JP 2006-75066 20060317

L1 ANSWER 16 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1089200 CAPLUS <<LOGINID::20080627>>
DN 147:407498
TI The positive photosensitive composition for pattern formation
IN Tarutani, Shinji; Tsubaki, Hideaki; Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 53pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007249074	A	20070927	JP 2006-75532	20060317
PRAI JP 2006-75532		20060317		

L1 ANSWER 17 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1060084 CAPLUS <<LOGINID::20080627>>
DN 147:395138
TI Resist compositions for extreme ultraviolet lithography
IN Tamura, Minoru; Suzuki, Kaoru; Kaneko, Ikuhiro; Horibe, Mineko; Uno, Akinori; Kubo, Yoshiyasu; Kinoshita, Hiroo; Watanabe, Takeo
PA Lion Corp., Japan; Hyogo Prefecture
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007241121	A	20070920	JP 2006-66513	20060310
PRAI JP 2006-66513		20060310		

OS MARPAT 147:395138

L1 ANSWER 18 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1060027 CAPLUS <<LOGINID::20080627>>
DN 147:395135
TI Positive-working photosensitive resin composition and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication
IN Kodama, Kunihiko; Yamamoto, Satoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007240977	A	20070920	JP 2006-64607	20060309
PRAI JP 2006-64607		20060309		

L1 ANSWER 19 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1052597 CAPLUS <<LOGINID::20080627>>
DN 147:374541

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TI   Positive photoresist composition and lithographic pattern forming method
     using the positive resist composition for semiconductor device fabrication
IN   Iwato, Kaoru; Kodama, Kunihiko; Yoshida, Yuko; Yamamoto, Kei
PA   Fujifilm Corporation, Japan
SO   Eur. Pat. Appl., 66pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   EP 1835343           A1    20070919    EP 2007-5242           20070314
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR,
             AL, BA, HR, MK, YU
     JP 2007279662         A     20071025    JP 2006-245681         20060911
     US 20070218405        A1    20070920    US 2007-717083         20070313
     KR 2007094547         A     20070920    KR 2007-26007          20070316
PRAI JP 2006-75067         A     20060317
     JP 2006-245681        A     20060911
RE.CNT  7     THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1   ANSWER 20 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:1029166  CAPLUS <<LOGINID::20080627>>
DN   147:374534
TI   Photosensitive photoresist composition as part of pattern-forming
     immersion lithographic method for manufacture of semiconductor devices
IN   Wada, Kenji
PA   Fujifilm Corporation, Japan
SO   U.S. Pat. Appl. Publ., 74pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   US 20070212645       A1    20070913    US 2007-716054         20070309
     JP 2007240978        A     20070920    JP 2006-64608          20060309
PRAI JP 2006-64608        A     20060309
OS   MARPAT 147:374534

L1   ANSWER 21 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:942790  CAPLUS <<LOGINID::20080627>>
DN   147:311278
TI   Photosensitive composition for photoresist, immersion lithography
     pattern-forming method using the photosensitive composition and compounds
     used in the photosensitive composition.
IN   Wada, Kenji
PA   Fujifilm Corporation, Japan
SO   U.S. Pat. Appl. Publ., 73pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
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PI   US 20070196766       A1    20070823    US 2007-708017         20070220
     JP 2007219411        A     20070830    JP 2006-42691          20060220
PRAI JP 2006-42691        A     20060220

L1   ANSWER 22 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:815779  CAPLUS <<LOGINID::20080627>>
DN   147:200055
TI   Positive photosensitive photoresist composition and far-UV lithographic
     method of forming pattern for semiconductor device fabrication
IN   Takahashi, Hyou; Sugimoto, Naoya; Kodama, Kunihiko; Yamamoto, Kei
PA   Fujifilm Corporation, Japan
SO   Eur. Pat. Appl., 85pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   EP 1811341           A1    20070725    EP 2007-1487           20070124
        R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
            BA, HR, MK, RS
     JP 2007272194        A     20071018    JP 2007-12723          20070123
     US 20070172761       A1    20070726    US 2007-657106         20070124
     KR 20070077796       A     20070727    KR 2007-7648           20070124
PRAI JP 2006-15348        A     20060124
     JP 2006-64476        A     20060309
RE.CNT  5     THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1   ANSWER 23 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:759175  CAPLUS <<LOGINID::20080627>>
DN   147:154006
TI   Chemically amplified positive-working resist compositions and method for
     their patterning
IN   Iwato, Kaoru; Kodama, Kunihiko
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 72pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   JP 2007178621        A     20070712    JP 2005-375705         20051227
PRAI JP 2005-375705               20051227

L1   ANSWER 24 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:502254  CAPLUS <<LOGINID::20080627>>
DN   146:490422
TI   Positive resist composition with resin, photoacid and solvent for
     microlithographic pattern formation method
IN   Iwato, Kaoru; Kodama, Kunihiko
PA   Fujifilm Corporation, Japan
SO   Eur. Pat. Appl., 68pp.
     CODEN: EPXXDW
DT   Patent
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LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1783550	A1	20070509	EP 2006-23246	20061108
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
US 20070105045	A1	20070510	US 2006-594085	20061108
KR 2007049586	A	20070511	KR 2006-109864	20061108
JP 2007156450	A	20070621	JP 2006-302766	20061108
PRAI JP 2005-323470	A	20051108		

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 25 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:438554 CAPLUS <<LOGINID::20080627>>
DN 146:451571
TI Positive-working photosensitive composition and pattern forming method using the same
IN Nishiyama, Fumiyuki; Kodama, Kunihiko
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 78pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20070087288	A1	20070419	US 2006-581407	20061017
JP 2007108581	A	20070426	JP 2005-301731	20051017
PRAI JP 2005-301731	A	20051017		

OS MARPAT 146:451571

L1 ANSWER 26 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:326147 CAPLUS <<LOGINID::20080627>>
DN 148:249967
TI Beneficial photoacid generator for CA resist in EUVL
AU Watanabe, Takeo; Hada, Hideo; Fukushima, Yasuyuki; Shiotani, Hideaki; Kinoshita, Hiroo; Komano, Hiroshi
CS Laboratory of Advanced Science and Technology for Industry, University of Hyogo, 3-1-2 Kouto, Kamigoori-cho, Akou-gun, Hyogo, 678-1205, Japan
SO AIP Conference Proceedings (2007), 879(Pt. 2, Synchrotron Radiation Instrumentation, Part 2), 1470-1473
CODEN: APCPCS; ISSN: 0094-243X
PB American Institute of Physics
DT Journal
LA English
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 27 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:323011 CAPLUS <<LOGINID::20080627>>
DN 146:347444
TI Positive resist composition and pattern forming method using the same
IN Yamamoto, Kei; Kanna, Shinichi
PA Fujifilm Corporation, Japan

SO Eur. Pat. Appl., 54pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1764649	A2	20070321	EP 2006-19676	20060920
	EP 1764649	A3	20071031		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007086166	A	20070405	JP 2005-272074	20050920
	US 20070065752	A1	20070322	US 2006-523551	20060920
	KR 2007032929	A	20070323	KR 2006-91312	20060920
PRAI	JP 2005-272074	A	20050920		

OS MARPAT 146:347444

L1 ANSWER 28 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:283563 CAPLUS <<LOGINID::20080627>>
DN 146:305061
TI Positive photoresist compositions containing prescribed tertiary amines and their patterning
IN Sugimoto, Naoya
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007065337	A	20070315	JP 2005-251710	20050831
PRAI	JP 2005-251710		20050831		

OS MARPAT 146:305061

L1 ANSWER 29 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:192927 CAPLUS <<LOGINID::20080627>>
DN 146:283884
TI Positive resist composition for immersion exposure and pattern-forming method using the same
IN Inabe, Haruki; Kanda, Hiromi; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 51pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070042290	A1	20070222	US 2006-503958	20060815
	JP 2007052346	A	20070301	JP 2005-238734	20050819
	EP 1764647	A2	20070321	EP 2006-17164	20060817
	EP 1764647	A3	20070718		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

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     KR 2007021974         A      20070223    KR 2006-78391          20060818
PRAI JP 2005-238734        A      20050819

L1   ANSWER 30 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:192421  CAPLUS <<LOGINID::20080627>>
DN   146:262065
TI   Positive resist composition and a pattern forming method using the same
IN   Sato, Kenichiro
PA   Fuji Photo Film Co., Ltd., Japan
SO   Eur. Pat. Appl., 48pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   EP 1755000          A2     20070221    EP 2006-16530          20060808
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
     JP 2007052107         A      20070301    JP 2005-235801         20050816
     US 20070042291        A1     20070222    US 2006-504040         20060815
     KR 2007021066         A      20070222    KR 2006-77025          20060816
PRAI JP 2005-235801        A      20050816

L1   ANSWER 31 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:169928  CAPLUS <<LOGINID::20080627>>
DN   146:239309
TI   Resist composition with improved exposure latitude and PEB temperature
     dependence, and method of forming pattern using the same
IN   Iwato, Kaoru
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 57pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   JP 2007041146         A      20070215    JP 2005-223135         20050801
PRAI JP 2005-223135                20050801
OS   MARPAT 146:239309

L1   ANSWER 32 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:116336  CAPLUS <<LOGINID::20080627>>
DN   146:193831
TI   Positive-working resist composition containing lactone compound and
     pattern formation
IN   Tsubaki, Hideaki; Iwato, Kaoru; Kodama, Kunihiko
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 62pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
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PI JP 2007025240 A 20070201 JP 2005-207102 20050715
PRAI JP 2005-207102 20050715
OS MARPAT 146:193831

L1 ANSWER 33 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1354917 CAPLUS <<LOGINID::20080627>>
DN 146:90250
TI Photosensitive composition, pattern forming method using the photosensitive composition and compound for use in the photosensitive composition
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 76pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1736825	A2	20061227	EP 2006-12669	20060620
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007003619	A	20070111	JP 2005-180980	20050621
	KR 2006133922	A	20061227	KR 2006-55907	20060621
	US 20070082289	A1	20070412	US 2006-471713	20060621
PRAI	JP 2005-180980	A	20050621		
OS	MARPAT 146:90250				

L1 ANSWER 34 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1351698 CAPLUS <<LOGINID::20080627>>
DN 146:111227
TI Positive-working photoresist composition and method for pattern formation using the same
IN Wada, Kenji
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 76pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006350212	A	20061228	JP 2005-179335	20050620
PRAI	JP 2005-179335		20050620		
OS	MARPAT 146:111227				

L1 ANSWER 35 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1309172 CAPLUS <<LOGINID::20080627>>
DN 146:71859
TI Positive-working photoresist composition and method for pattern formation using the same
IN Takahashi, Omote
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 46pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006337507	A	20061214	JP 2005-159475	20050531
PRAI	JP 2005-159475		20050531		

L1 ANSWER 36 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1282686 CAPLUS <<LOGINID::20080627>>
DN 146:35895
TI Photoresist compositions with improved sensitivity and contrast in EUV exposure and method for forming precise patterns therewith
IN Wada, Kenji
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 82pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006330099	A	20061207	JP 2005-149989	20050523
PRAI	JP 2005-149989		20050523		
OS	MARPAT 146:35895				

L1 ANSWER 37 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1229271 CAPLUS <<LOGINID::20080627>>
DN 146:16294
TI Resist composition and pattern-forming method using the same
IN Takahashi, Omote; Kawabe, Yasumasa
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006317794	A	20061124	JP 2005-141633	20050513
PRAI	JP 2005-141633		20050513		
OS	MARPAT 146:16294				

L1 ANSWER 38 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1155062 CAPLUS <<LOGINID::20080627>>
DN 145:480445
TI Photoresist composition for immersion photolithography and method for pattern formation using the same
IN Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 42pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006301435	A	20061102	JP 2005-125418	20050422

PRAI JP 2005-125418 20050422

L1 ANSWER 39 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1154998 CAPLUS <<LOGINID::20080627>>
DN 145:480444
TI Photoresist composition for immersion photolithography and method for pattern formation using the same
IN Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006301278	A	20061102	JP 2005-122622	20050420
PRAI JP 2005-122622		20050420		

L1 ANSWER 40 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1065387 CAPLUS <<LOGINID::20080627>>
DN 145:429410
TI Positive resist composition and patterning method
IN Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006276458	A	20061012	JP 2005-95523	20050329
PRAI JP 2005-95523		20050329		

L1 ANSWER 41 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1065384 CAPLUS <<LOGINID::20080627>>
DN 145:429409
TI Photosensitive composition and patterning method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 74pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006276444	A	20061012	JP 2005-95325	20050329
PRAI JP 2005-95325		20050329		

L1 ANSWER 42 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1035384 CAPLUS <<LOGINID::20080627>>
DN 145:407587
TI Positive-working resist composition and pattern-forming method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 63pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006267637	A	20061005	JP 2005-86516	20050324
PRAI JP 2005-86516		20050324		

OS MARPAT 145:407587

L1 ANSWER 43 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1010147 CAPLUS <<LOGINID::20080627>>
DN 145:366508
TI Photoacid generation type photosensitive composition and pattern formation method
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006258925	A	20060928	JP 2005-73178	20050315
PRAI JP 2005-73178		20050315		

OS MARPAT 145:366508

L1 ANSWER 44 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:981111 CAPLUS <<LOGINID::20080627>>
DN 145:366500
TI Positive-working photoresist compositions and method for their patterning
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 64pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006251672	A	20060921	JP 2005-71192	20050314
PRAI JP 2005-71192		20050314		

OS MARPAT 145:366500

L1 ANSWER 45 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:972498 CAPLUS <<LOGINID::20080627>>
DN 145:366479
TI Positive resist composition and pattern forming method using the resist composition
IN Nishiyama, Fumiyuki
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 76pp.
CODEN: EPXXDW
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1703322	A2	20060920	EP 2006-5356	20060316
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006259277	A	20060928	JP 2005-77103	20050317
	US 20060210922	A1	20060921	US 2006-377728	20060317
PRAI	JP 2005-77103	A	20050317		
OS	MARPAT 145:366479				

L1 ANSWER 46 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:949983 CAPLUS <<LOGINID::20080627>>
DN 145:345253
TI Positive photosensitive composition for far UV and pattern-forming method using the same
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 49pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1701214	A1	20060913	EP 2006-4947	20060310
	EP 1701214	B1	20080423		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 20060204890	A1	20060914	US 2006-370983	20060309
	JP 2006285228	A	20061019	JP 2006-66355	20060310
	AT 393413	T	20080515	AT 2006-4947	20060310
PRAI	JP 2005-68920	A	20050311		
OS	MARPAT 145:345253				
RE.CNT	3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L1 ANSWER 47 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:796154 CAPLUS <<LOGINID::20080627>>
DN 145:238217
TI Positive-working resist composition and method for resist pattern formation
IN Takeshita, Masaru
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 57pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006082740	A1	20060810	WO 2006-JP301127	20060125
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ,				

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            LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
            NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
            SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
            YU, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
    JP 2006215068       A     20060817    JP 2005-24869          20050201
    CN 101107567        A     20080116    CN 2006-80003225       20060125
    KR 2007101316       A     20071016    KR 2007-718291         20070809
PRAI JP 2005-24869      A     20050201
    WO 2006-JP301127    W     20060125
RE.CNT  10    THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1   ANSWER 48 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:730440  CAPLUS <<LOGINID::20080627>>
DN   145:198789
TI   Photosensitive composition, compound for use in the photosensitive
     composition and pattern forming method using the photosensitive
     composition
IN   Wada, Kenji
PA   Fuji Photo Film Co., Ltd., Japan
SO   Eur. Pat. Appl., 87 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   EP 1684116          A2     20060726    EP 2006-1308           20060123
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
             BA, HR, IS, YU
    JP 2006201711        A      20060803    JP 2005-15965          20050124
    US 20060166135       A1     20060727    US 2006-335679         20060120
    KR 2006085595        A      20060727    KR 2006-7264           20060124
PRAI JP 2005-15965       A      20050124
OS   MARPAT 145:198789

L1   ANSWER 49 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:655347  CAPLUS <<LOGINID::20080627>>
DN   145:92995
TI   Positive resist compositions for far UV exposure and method for their
     patterning
IN   Sato, Kenichiro
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 62 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   JP 2006178172       A      20060706    JP 2004-371122         20041222
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PRAI JP 2004-371122 20041222

L1 ANSWER 50 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:435401 CAPLUS <<LOGINID::20080627>>
DN 146:368572
TI Optimization of photoacid generator in CA resist for EUVL
AU Watanabe, Takeo; Hada, Hideo; Kinoshita, Hiroo; Tanaka, Yuzuru; Shiotani, Hideaki; Fukushima, Yasuyuki; Komano, Hiroji
CS Lab. of Advanced Science and Technology for Industry, Univ. of Hyogo, 3-1-2, Kouto, Kamigoori-cho, Akou-gun, Hyogo, 678-1205, Japan
SO Proceedings of SPIE-The International Society for Optical Engineering (2006), 6153(Pt. 2, Advances in Resist Technology and Processing XXIII), 615343/1-615343/9
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 51 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:340231 CAPLUS <<LOGINID::20080627>>
DN 144:379106
TI Positive-working photoresist composition and method for pattern formation using the same
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 76 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006098740	A	20060413	JP 2004-284810	20040929
PRAI JP 2004-284810		20040929		

L1 ANSWER 52 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:234860 CAPLUS <<LOGINID::20080627>>
DN 144:321520
TI Electron-beam or EUV (extreme ultraviolet) resist composition and process for the formation of resist patterns
IN Hada, Hideo; Shiono, Daiju; Kinoshita, Hiroo; Watanabe, Takeo
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006027997	A1	20060316	WO 2005-JP16013	20050901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,				

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            SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
            ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
    JP 2006078760        A     20060323    JP 2004-262488          20040909
    EP 1791024           A1    20070530    EP 2005-781331          20050901
       R:  DE, FR, IT
    US 20070269744       A1    20071122    US 2007-573884          20070216
    KR 2007040831        A     20070417    KR 2007-705189          20070305
PRAI JP 2004-262488      A     20040909
    WO 2005-JP16013      W     20050901
OS  MARPAT 144:321520
RE.CNT  12    THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1  ANSWER 53 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN  2006:185073  CAPLUS <<LOGINID::20080627>>
DN  144:283218
TI  Positive resist composition and pattern forming method
IN  Sato, Kenichiro
PA  Fuji Photo Film Co., Ltd., Japan
SO  Eur. Pat. Appl., 61 pp.
    CODEN: EPXXDW
DT  Patent
LA  English
FAN.CNT 1
    PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
    --------------      ----   --------    --------------------    --------
PI  EP 1630607          A2     20060301    EP 2005-18577           20050826
    EP 1630607          A3     20070509
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
            BA, HR, IS, YU
    JP 2006091830        A     20060406    JP 2005-68921           20050311
    US 20060046190       A1    20060302    US 2005-210672          20050825
    US 7291441           B2    20071106
PRAI JP 2004-246995      A     20040826
    JP 2005-68921        A     20050311

L1  ANSWER 54 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN  2006:141743  CAPLUS <<LOGINID::20080627>>
DN  144:243392
TI  Photosensitive composition and patterning method
IN  Wada, Kenji
PA  Fuji Photo Film Co., Ltd., Japan
SO  Jpn. Kokai Tokkyo Koho, 123 pp.
    CODEN: JKXXAF
DT  Patent
LA  Japanese
FAN.CNT 1
    PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
    --------------      ----   --------    --------------------    --------
PI  JP 2006047533        A     20060216    JP 2004-226389          20040803
PRAI JP 2004-226389             20040803
```

OS MARPAT 144:243392

L1 ANSWER 55 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:75337 CAPLUS <<LOGINID::20080627>>
DN 144:160276
TI Resist composition containing specific acid generator and method of forming resist pattern by immersion photolithography
IN Tsuji, Hiromitsu; Utsumi, Yoshiyuki
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006008914	A1	20060126	WO 2005-JP11737	20050627
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006058842	A	20060302	JP 2005-52032	20050225
TW 279646	B	20070421	TW 2005-94121941	20050629
PRAI JP 2004-215404	A	20040723		
JP 2005-52032	A	20050225		

OS MARPAT 144:160276
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 56 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1239721 CAPLUS <<LOGINID::20080627>>
DN 143:485829
TI Chemically-amplified positive-working photosensitive compositions, polymers and their monomers for the compositions, and method for their patterning
IN Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005326609	A	20051124	JP 2004-144470	20040514
PRAI JP 2004-144470		20040514		

OS MARPAT 143:485829

L1 ANSWER 57 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1175817 CAPLUS <<LOGINID::20080627>>
DN 143:449371
TI Positive photoresist composition for immersion exposure and patterning method
IN Kanda, Hiromi; Kanna, Shinichi; Inabe, Haruki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005309376	A	20051104	JP 2005-713	20050105
PRAI	JP 2004-90354	A	20040325		

L1 ANSWER 58 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:954632 CAPLUS <<LOGINID::20080627>>
DN 143:413410
TI Development of fast-photospeed chemically amplified resist in extreme ultraviolet lithography
AU Watanabe, Takeo; Hada, Hideo; Lee, Seung Yoon; Kinoshita, Hiroo; Hamamoto, Kazuhiro; Komano, Hiroshi
CS Laboratory of Advanced Science and Technology for Industry, University of Hyogo, Hyogo, 678-1205, Japan
SO Japanese Journal of Applied Physics, Part 1: Regular Papers, Brief Communications & Review Papers (2005), 44(7B), 5866-5870
CODEN: JAPNDE
PB Japan Society of Applied Physics
DT Journal
LA English
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 59 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:822672 CAPLUS <<LOGINID::20080627>>
DN 143:219455
TI Chemically-amplified far-UV positive photoresists and negative photoresists, and their patterning method
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005221721	A	20050818	JP 2004-29068	20040205
	US 20050266336	A1	20051201	US 2005-41748	20050125
	EP 1566692	A1	20050824	EP 2005-2140	20050202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
PRAI	JP 2004-29068	A	20040205		

OS MARPAT 143:219455

L1 ANSWER 60 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:607952 CAPLUS <<LOGINID::20080627>>
DN 144:378928
TI Resist development status for immersion lithography
AU Tsuji, Hiromitsu; Yoshida, Masaaki; Ishizuka, Keita; Hirano, Tomoyuki; Endo, Kotaro; Ohmori, Katsumi
CS Advanced Material Development Division I, Tokyo Ohka Kogyo Co., Ltd., Kanagawa, 253-0114, Japan
SO Journal of Photopolymer Science and Technology (2005), 18(5), 641-645
CODEN: JSTEEW; ISSN: 0914-9244
PB Technical Association of Photopolymers, Japan
DT Journal
LA English
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 61 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:607924 CAPLUS <<LOGINID::20080627>>
DN 144:400987
TI Outgassing analysis in EUV resist
AU Hada, Hideo; Watanabe, Takeo; Kinoshita, Hiroo; Komano, Hiroji
CS New Technology Development Section, Tokyo Ohka Kogyo Co., Ltd., Kanagawa, 253-0114, Japan
SO Journal of Photopolymer Science and Technology (2005), 18(4), 475-480
CODEN: JSTEEW; ISSN: 0914-9244
PB Technical Association of Photopolymers, Japan
DT Journal
LA English
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 62 OF 65 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:547798 CAPLUS <<LOGINID::20080627>>
DN 143:86703
TI Photoresist composition and method for forming resist pattern
IN Tsuji, Hiromitsu; Endo, Kotaro
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005057284	A1	20050623	WO 2004-JP17719	20041129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005172949	A	20050630	JP 2003-409500	20031208

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     US 20070148581        A1     20070628    US 2006-581777         20060606
PRAI JP 2003-409500        A      20031208
     WO 2004-JP17719       W      20041129
OS   MARPAT 143:86703
RE.CNT  18    THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1   ANSWER 63 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2005:540706  CAPLUS <<LOGINID::20080627>>
DN   143:86696
TI   Positive resist composition and method for forming resist pattern
IN   Hada, Hideo; Takeshita, Masaru; Hayashi, Ryotaro; Matsumaru, Syogo
PA   Tokyo Ohka Kogyo Co., Ltd., Japan
SO   PCT Int. Appl., 42 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2005057287        A1     20050623    WO 2004-JP18189        20041207
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     JP 2005173468         A      20050630    JP 2003-416584         20031215
     TW 286670             B      20070911    TW 2004-93138146       20041209
PRAI JP 2003-416584        A      20031215
OS   MARPAT 143:86696
RE.CNT  13    THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1   ANSWER 64 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2005:395616  CAPLUS <<LOGINID::20080627>>
DN   142:454316
TI   Chemically amplified photoresist composition and method for forming resist
     pattern
IN   Hada, Hideo; Takeshita, Masaru; Hayashi, Ryotaro; Matsumaru, Syogo;
     Hirayama, Taku; Shimizu, Hiroaki
PA   Tokyo Ohka Kogyo Co., Ltd., Japan
SO   PCT Int. Appl., 43 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2005040922        A1     20050506    WO 2004-JP15504        20041020
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
    JP 2005196095        A     20050721    JP 2004-57448          20040302
    KR 801050            B1    20080204    KR 2006-707537         20060419
    US 20070275307       A1    20071129    US 2007-576405         20070430
PRAI JP 2003-363521      A     20031023
    JP 2003-410489       A     20031209
    JP 2004-57448        A     20040302
    WO 2004-JP15504      W     20041020
OS  MARPAT 142:454316
RE.CNT  10    THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1  ANSWER 65 OF 65  CAPLUS  COPYRIGHT 2008 ACS on STN
AN  2004:1080948  CAPLUS <<LOGINID::20080627>>
DN  142:65308
TI  Resin and chain transfer agent for photoresist composition, photoresist
    composition and method for forming resist pattern
IN  Hada, Hideo; Takeshita, Masaru; Matsumaru, Syogo; Shimizu, Hiroaki
PA  Tokyo Ohka Kogyo Co., Ltd., Japan
SO  PCT Int. Appl., 42 pp.
    CODEN: PIXXD2
DT  Patent
LA  Japanese
FAN.CNT 1
    PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
    ----------          ----   --------    -------------------    --------
PI  WO 2004108780        A1    20041216    WO 2004-JP8004         20040602
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
            NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
    JP 2005206775        A     20050804    JP 2004-57449          20040302
    US 20070065748       A1    20070322    US 2005-557694         20051122
PRAI JP 2003-160478      A     20030605
    JP 2003-428853       A     20031225
    JP 2004-57449        A     20040302
    WO 2004-JP8004       W     20030602
RE.CNT  12    THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    91.69      91.90

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -0.80      -0.80

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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.24      92.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -0.80

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STRUCTURE FILE UPDATES:   26 JUN 2008  HIGHEST RN 1031085-65-0
DICTIONARY FILE UPDATES:  26 JUN 2008  HIGHEST RN 1031085-65-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>  s  808752-25-2/rn
L2            1 808752-25-2/RN

=> d 12

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN     ***808752-25-2***     REGISTRY
ED   Entered STN:  06 Jan 2005
```

CN Sulfonium, triphenyl-, salt with 4,4,5,5,6,6-hexafluorodihydro-4H-1,3,2-dithiazine 1,1,3,3-tetraoxide (1:1) (CA INDEX NAME)
DR 949096-86-0
MF C18 H15 S . C3 F6 N O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

CRN 146063-77-6
CMF C3 F6 N O4 S2

/ Structure 1 in file .gra /

CM 2

CRN 18393-55-0
CMF C18 H15 S

/ Structure 2 in file .gra /

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

65 REFERENCES IN FILE CA (1907 TO DATE)
65 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.46	94.60
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.80

FILE 'REGISTRY' ENTERED AT 08:33:40 ON 27 JUN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 JUN 2008 HIGHEST RN 1031085-65-0
DICTIONARY FILE UPDATES: 26 JUN 2008 HIGHEST RN 1031085-65-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when

conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L2 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L3 1 808752-25-2/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CA

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.55	95.15

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.80

FILE 'CA' ENTERED AT 08:33:45 ON 27 JUN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 26 Jun 2008 VOL 149 ISS 1
FILE LAST UPDATED: 26 Jun 2008 (20080626/ED)

CA now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> S L3

L4   65 L3

=> DIS L4 1 TI

L4   ANSWER 1 OF 65 CA COPYRIGHT 2008 ACS on STN
TI   Chemically amplified far-UV positive photoresist compositions, and their
     patterning method

=> d 14

L4   ANSWER 1 OF 65 CA COPYRIGHT 2008 ACS on STN
AN   149:21046 CA <<LOGINID::20080627>>
TI   Chemically amplified far-UV positive photoresist compositions, and their
     patterning method
IN   Saegusa, Hiroshi
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 69pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.   KIND   DATE   APPLICATION NO.   DATE
     ---------------   ----   --------   --------------------   --------
PI   JP 2008129343   A   20080605   JP 2006-314466   20061121
PRAI JP 2006-314466   20061121

=> d 14 1 -65

L4   ANSWER 1 OF 65 CA COPYRIGHT 2008 ACS on STN
AN   149:21046 CA <<LOGINID::20080627>>
TI   Chemically amplified far-UV positive photoresist compositions, and their
     patterning method
IN   Saegusa, Hiroshi
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 69pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.   KIND   DATE   APPLICATION NO.   DATE
     ---------------   ----   --------   --------------------   --------
PI   JP 2008129343   A   20080605   JP 2006-314466   20061121
PRAI JP 2006-314466   20061121

L4 ANSWER 1 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 149:21046 CA <<LOGINID::20080627>>
TI Chemically amplified far-UV positive photoresist compositions, and their patterning method
IN Saegusa, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008129343	A	20080605	JP 2006-314466	20061121
PRAI JP 2006-314466		20061121		

L4 ANSWER 2 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:572489 CA <<LOGINID::20080627>>
TI Positively working photosensitive resin compositions, esters, and their nanometer-sized pattern formation
IN Saegusa, Hiroshi; Kodama, Kunihiko; Tsubaki, Hideaki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 60pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008116720	A	20080522	JP 2006-300263	20061106
PRAI JP 2006-300263		20061106		

L4 ANSWER 3 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:526570 CA <<LOGINID::20080627>>
TI Positive-working photosensitive composition and method of forming pattern
IN Yamaguchi, Shuhei; Kodama, Kunihiko; Tsubaki, Hideaki; Taguchi, Norihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008107793	A	20080508	JP 2007-214913	20070821
PRAI JP 2006-260430	A	20060926		

L4 ANSWER 4 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:459637 CA <<LOGINID::20080627>>
TI Positive-working photosensitive composition and method of forming pattern using the same
IN Kodama, Kunihiko; Tsubaki, Hideaki; Taguchi, Norihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 50pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008083159	A	20080410	JP 2006-260432	20060926
PRAI	JP 2006-260432		20060926		

L4 ANSWER 5 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:437348 CA <<LOGINID::20080627>>
TI Radiation-sensitive resists for liquid immersion lithography, their acid generators, and preparation thereof
IN Nagai, Tomoki
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 25pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008089777	A	20080417	JP 2006-268488	20060929
PRAI	JP 2006-268488		20060929		

L4 ANSWER 6 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:414272 CA <<LOGINID::20080627>>
TI Resist composition and pattern forming method using the same
IN Tsuchihashi, Toru; Nishiyama, Fumiyuki; Makino, Masaomi; Mizutani, Kazuyoshi
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 50pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1906240	A2	20080402	EP 2007-18265	20070918
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2008089790	A	20080417	JP 2006-268604	20060929
	US 20080081292	A1	20080403	US 2007-863314	20070928
PRAI	JP 2006-268604	A	20060929		

L4 ANSWER 7 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:318679 CA <<LOGINID::20080627>>
TI Manufacture of polymers by chain-transfer reaction, their positively working resist compositions and pattern formation, and compounds for chain-transfer agents
IN Kaneko, Yushi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 58pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 2008056810 A 20080313 JP 2006-235617 20060831
PRAI JP 2006-235617 20060831

L4 ANSWER 8 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:249967 CA <<LOGINID::20080627>>
TI Beneficial photoacid generator for CA resist in EUVL
AU Watanabe, Takeo; Hada, Hideo; Fukushima, Yasuyuki; Shiotani, Hideaki; Kinoshita, Hiroo; Komano, Hiroshi
CS Laboratory of Advanced Science and Technology for Industry, University of Hyogo, 3-1-2 Kouto, Kamigoori-cho, Akou-gun, Hyogo, 678-1205, Japan
SO AIP Conference Proceedings (2007), 879(Pt. 2, Synchrotron Radiation Instrumentation, Part 2), 1470-1473
CODEN: APCPCS; ISSN: 0094-243X
PB American Institute of Physics
DT Journal
LA English
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:202132 CA <<LOGINID::20080627>>
TI Positive resist composition and method of forming resist pattern
IN Mimura, Takeyoshi; Kawaue, Akiya; Takasu, Ryoichi
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 65pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008012999	A1	20080131	WO 2007-JP61648	20070608
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2008026725	A	20080207	JP 2006-201008	20060724
JP 2008032839	A	20080214	JP 2006-203629	20060726
JP 2008032840	A	20080214	JP 2006-203630	20060726
PRAI JP 2006-201008	A	20060724		
JP 2006-203629	A	20060726		
JP 2006-203630	A	20060726		

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:155419 CA <<LOGINID::20080627>>
TI Resist polymers and their manufacture, resist compositions with improved resolution and exposure latitude, positive or negative resist

compositions, and pattern formation
IN Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008013733	A	20080124	JP 2006-189266	20060710
PRAI JP 2006-189266		20060710		

L4 ANSWER 11 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 148:66139 CA <<LOGINID::20080627>>
TI Positive photoresist compositions, method for forming patterns therewith, and resins and monomers therefor
IN Saegusa, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 50pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007322660	A	20071213	JP 2006-151869	20060531
PRAI JP 2006-151869		20060531		

L4 ANSWER 12 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:469889 CA <<LOGINID::20080627>>
TI Fluorine-containing polymer, purification method, and radiation-sensitive resin composition
IN Nakagawa, Hiroki; Nakashima, Hiromitsu; Wakamatsu, Gouji; Harada, Kentarou; Nishimura, Yukio; Shioya, Takeo
PA JSR Corporation, Japan
SO PCT Int. Appl., 86pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007116664	A1	20071018	WO 2007-JP56094	20070323
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI JP 2006-99889	A	20060331		

JP 2006-165310 A 20060614
JP 2006-247299 A 20060912
JP 2007-10765 A 20070119
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:458853 CA <<LOGINID::20080627>>
TI Radiation-sensitive positive resist compositions forming patterns with minimized line edge roughness and etching resistance
IN Shimizu, Daisuke; Matsumura, Shinji
PA Jsr Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007264051	A	20071011	JP 2006-85513	20060327
PRAI JP 2006-85513		20060327		

OS MARPAT 147:458853

L4 ANSWER 14 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:436848 CA <<LOGINID::20080627>>
TI Positive photoresists and their patterning with minimum line-edge roughness and without collapse
IN Yoshida, Yuko; Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007256640	A	20071004	JP 2006-81054	20060323
PRAI JP 2006-81054		20060323		

L4 ANSWER 15 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:436845 CA <<LOGINID::20080627>>
TI Positive resist composition and patterning method
IN Morita, Kensuke; Makino, Masaomi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007256347	A	20071004	JP 2006-77244	20060320
PRAI JP 2006-77244		20060320		

L4 ANSWER 16 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:416410 CA <<LOGINID::20080627>>
TI Positive-working photosensitive composition and patterning method

IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 39pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007249024	A	20070927	JP 2006-75066	20060317
PRAI	JP 2006-75066		20060317		

L4 ANSWER 17 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:407498 CA <<LOGINID::20080627>>
TI The positive photosensitive composition for pattern formation
IN Tarutani, Shinji; Tsubaki, Hideaki; Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 53pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007249074	A	20070927	JP 2006-75532	20060317
PRAI	JP 2006-75532		20060317		

L4 ANSWER 18 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:395138 CA <<LOGINID::20080627>>
TI Resist compositions for extreme ultraviolet lithography
IN Tamura, Minoru; Suzuki, Kaoru; Kaneko, Ikuhiro; Horibe, Mineko; Uno, Akinori; Kubo, Yoshiyasu; Kinoshita, Hiroo; Watanabe, Takeo
PA Lion Corp., Japan; Hyogo Prefecture
SO Jpn. Kokai Tokkyo Koho, 45pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007241121	A	20070920	JP 2006-66513	20060310
PRAI	JP 2006-66513		20060310		
OS	MARPAT 147:395138				

L4 ANSWER 19 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:395135 CA <<LOGINID::20080627>>
TI Positive-working photosensitive resin composition and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication
IN Kodama, Kunihiko; Yamamoto, Satoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	JP 2007240977	A	20070920	JP 2006-64607	20060309
PRAI	JP 2006-64607		20060309		

L4 ANSWER 20 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:374541 CA <<LOGINID::20080627>>
TI Positive photoresist composition and lithographic pattern forming method using the positive resist composition for semiconductor device fabrication
IN Iwato, Kaoru; Kodama, Kunihiko; Yoshida, Yuko; Yamamoto, Kei
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 66pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1835343	A1	20070919	EP 2007-5242	20070314
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007279662	A	20071025	JP 2006-245681	20060911
	US 20070218405	A1	20070920	US 2007-717083	20070313
	KR 2007094547	A	20070920	KR 2007-26007	20070316
PRAI	JP 2006-75067	A	20060317		
	JP 2006-245681	A	20060911		

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:374534 CA <<LOGINID::20080627>>
TI Photosensitive photoresist composition as part of pattern-forming immersion lithographic method for manufacture of semiconductor devices
IN Wada, Kenji
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 74pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070212645	A1	20070913	US 2007-716054	20070309
	JP 2007240978	A	20070920	JP 2006-64608	20060309
PRAI	JP 2006-64608	A	20060309		

OS MARPAT 147:374534

L4 ANSWER 22 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:311278 CA <<LOGINID::20080627>>
TI Photosensitive composition for photoresist, immersion lithography pattern-forming method using the photosensitive composition and compounds used in the photosensitive composition.
IN Wada, Kenji
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 73pp.
CODEN: USXXCO
DT Patent

LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20070196766	A1	20070823	US 2007-708017	20070220
JP 2007219411	A	20070830	JP 2006-42691	20060220
PRAI JP 2006-42691	A	20060220		

L4 ANSWER 23 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:200055 CA <<LOGINID::20080627>>
TI Positive photosensitive photoresist composition and far-UV lithographic method of forming pattern for semiconductor device fabrication
IN Takahashi, Hyou; Sugimoto, Naoya; Kodama, Kunihiko; Yamamoto, Kei
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 85pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1811341	A1	20070725	EP 2007-1487	20070124
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
JP 2007272194	A	20071018	JP 2007-12723	20070123
US 20070172761	A1	20070726	US 2007-657106	20070124
KR 2007077796	A	20070727	KR 2007-7648	20070124
PRAI JP 2006-15348	A	20060124		
JP 2006-64476	A	20060309		

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 147:154006 CA <<LOGINID::20080627>>
TI Chemically amplified positive-working resist compositions and method for their patterning
IN Iwato, Kaoru; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 72pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007178621	A	20070712	JP 2005-375705	20051227
PRAI JP 2005-375705		20051227		

L4 ANSWER 25 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:490422 CA <<LOGINID::20080627>>
TI Positive resist composition with resin, photoacid and solvent for microlithographic pattern formation method
IN Iwato, Kaoru; Kodama, Kunihiko
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 68pp.
CODEN: EPXXDW

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1783550	A1	20070509	EP 2006-23246	20061108
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	US 20070105045	A1	20070510	US 2006-594085	20061108
	KR 2007049586	A	20070511	KR 2006-109864	20061108
	JP 2007156450	A	20070621	JP 2006-302766	20061108
PRAI	JP 2005-323470	A	20051108		

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:451571 CA <<LOGINID::20080627>>
TI Positive-working photosensitive composition and pattern forming method using the same
IN Nishiyama, Fumiyuki; Kodama, Kunihiko
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 78pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070087288	A1	20070419	US 2006-581407	20061017
	JP 2007108581	A	20070426	JP 2005-301731	20051017
PRAI	JP 2005-301731	A	20051017		

OS MARPAT 146:451571

L4 ANSWER 27 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:368572 CA <<LOGINID::20080627>>
TI Optimization of photoacid generator in CA resist for EUVL
AU Watanabe, Takeo; Hada, Hideo; Kinoshita, Hiroo; Tanaka, Yuzuru; Shiotani, Hideaki; Fukushima, Yasuyuki; Komano, Hiroji
CS Lab. of Advanced Science and Technology for Industry, Univ. of Hyogo, 3-1-2, Kouto, Kamigoori-cho, Akou-gun, Hyogo, 678-1205, Japan
SO Proceedings of SPIE-The International Society for Optical Engineering (2006), 6153(Pt. 2, Advances in Resist Technology and Processing XXIII), 615343/1-615343/9
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 28 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:347444 CA <<LOGINID::20080627>>
TI Positive resist composition and pattern forming method using the same
IN Yamamoto, Kei; Kanna, Shinichi
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 54pp.

CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1764649	A2	20070321	EP 2006-19676	20060920
	EP 1764649	A3	20071031		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007086166	A	20070405	JP 2005-272074	20050920
	US 20070065752	A1	20070322	US 2006-523551	20060920
	KR 2007032929	A	20070323	KR 2006-91312	20060920
PRAI	JP 2005-272074	A	20050920		

OS MARPAT 146:347444

L4 ANSWER 29 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:305061 CA <<LOGINID::20080627>>
TI Positive photoresist compositions containing prescribed tertiary amines and their patterning
IN Sugimoto, Naoya
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007065337	A	20070315	JP 2005-251710	20050831
PRAI	JP 2005-251710		20050831		

OS MARPAT 146:305061

L4 ANSWER 30 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:283884 CA <<LOGINID::20080627>>
TI Positive resist composition for immersion exposure and pattern-forming method using the same
IN Inabe, Haruki; Kanda, Hiromi; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 51pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070042290	A1	20070222	US 2006-503958	20060815
	JP 2007052346	A	20070301	JP 2005-238734	20050819
	EP 1764647	A2	20070321	EP 2006-17164	20060817
	EP 1764647	A3	20070718		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	KR 2007021974	A	20070223	KR 2006-78391	20060818
PRAI	JP 2005-238734	A	20050819		

L4 ANSWER 31 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:262065 CA <<LOGINID::20080627>>
TI Positive resist composition and a pattern forming method using the same
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 48pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1755000	A2	20070221	EP 2006-16530	20060808
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007052107	A	20070301	JP 2005-235801	20050816
	US 20070042291	A1	20070222	US 2006-504040	20060815
	KR 2007021066	A	20070222	KR 2006-77025	20060816
PRAI	JP 2005-235801	A	20050816		

L4 ANSWER 32 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:239309 CA <<LOGINID::20080627>>
TI Resist composition with improved exposure latitude and PEB temperature dependence, and method of forming pattern using the same
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 57pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007041146	A	20070215	JP 2005-223135	20050801
PRAI	JP 2005-223135		20050801		
OS	MARPAT 146:239309				

L4 ANSWER 33 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:193831 CA <<LOGINID::20080627>>
TI Positive-working resist composition containing lactone compound and pattern formation
IN Tsubaki, Hideaki; Iwato, Kaoru; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 62pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007025240	A	20070201	JP 2005-207102	20050715
PRAI	JP 2005-207102		20050715		
OS	MARPAT 146:193831				

L4 ANSWER 34 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:111227 CA <<LOGINID::20080627>>

TI Positive-working photoresist composition and method for pattern formation using the same
IN Wada, Kenji
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 76pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006350212	A	20061228	JP 2005-179335	20050620
PRAI	JP 2005-179335		20050620		

OS MARPAT 146:111227

L4 ANSWER 35 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:90250 CA <<LOGINID::20080627>>
TI Photosensitive composition, pattern forming method using the photosensitive composition and compound for use in the photosensitive composition
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 76pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1736825	A2	20061227	EP 2006-12669	20060620
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007003619	A	20070111	JP 2005-180980	20050621
	KR 2006133922	A	20061227	KR 2006-55907	20060621
	US 20070082289	A1	20070412	US 2006-471713	20060621
PRAI	JP 2005-180980	A	20050621		

OS MARPAT 146:90250

L4 ANSWER 36 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:71859 CA <<LOGINID::20080627>>
TI Positive-working photoresist composition and method for pattern formation using the same
IN Takahashi, Omote
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 46pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006337507	A	20061214	JP 2005-159475	20050531
PRAI	JP 2005-159475		20050531		

L4 ANSWER 37 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:35895 CA <<LOGINID::20080627>>

TI Photoresist compositions with improved sensitivity and contrast in EUV exposure and method for forming precise patterns therewith
IN Wada, Kenji
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 82pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006330099	A	20061207	JP 2005-149989	20050523
PRAI	JP 2005-149989		20050523		

OS MARPAT 146:35895

L4 ANSWER 38 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 146:16294 CA <<LOGINID::20080627>>
TI Resist composition and pattern-forming method using the same
IN Takahashi, Omote; Kawabe, Yasumasa
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006317794	A	20061124	JP 2005-141633	20050513
PRAI	JP 2005-141633		20050513		

OS MARPAT 146:16294

L4 ANSWER 39 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:480445 CA <<LOGINID::20080627>>
TI Photoresist composition for immersion photolithography and method for pattern formation using the same
IN Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 42pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006301435	A	20061102	JP 2005-125418	20050422
PRAI	JP 2005-125418		20050422		

L4 ANSWER 40 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:480444 CA <<LOGINID::20080627>>
TI Photoresist composition for immersion photolithography and method for pattern formation using the same
IN Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006301278	A	20061102	JP 2005-122622	20050420
PRAI	JP 2005-122622		20050420		

L4 ANSWER 41 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:429410 CA <<LOGINID::20080627>>
TI Positive resist composition and patterning method
IN Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006276458	A	20061012	JP 2005-95523	20050329
PRAI	JP 2005-95523		20050329		

L4 ANSWER 42 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:429409 CA <<LOGINID::20080627>>
TI Photosensitive composition and patterning method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 74pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006276444	A	20061012	JP 2005-95325	20050329
PRAI	JP 2005-95325		20050329		

L4 ANSWER 43 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:407587 CA <<LOGINID::20080627>>
TI Positive-working resist composition and pattern-forming method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 63pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006267637	A	20061005	JP 2005-86516	20050324
PRAI	JP 2005-86516		20050324		
OS	MARPAT 145:407587				

L4 ANSWER 44 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:366508 CA <<LOGINID::20080627>>
TI Photoacid generation type photosensitive composition and pattern formation method
IN Wada, Kenji

PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006258925	A	20060928	JP 2005-73178	20050315
PRAI JP 2005-73178		20050315		

OS MARPAT 145:366508

L4 ANSWER 45 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:366500 CA <<LOGINID::20080627>>
TI Positive-working photoresist compositions and method for their patterning
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 64pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006251672	A	20060921	JP 2005-71192	20050314
PRAI JP 2005-71192		20050314		

OS MARPAT 145:366500

L4 ANSWER 46 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:366479 CA <<LOGINID::20080627>>
TI Positive resist composition and pattern forming method using the resist composition
IN Nishiyama, Fumiyuki
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 76pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1703322	A2	20060920	EP 2006-5356	20060316
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2006259277	A	20060928	JP 2005-77103	20050317
US 20060210922	A1	20060921	US 2006-377728	20060317
PRAI JP 2005-77103	A	20050317		

OS MARPAT 145:366479

L4 ANSWER 47 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:345253 CA <<LOGINID::20080627>>
TI Positive photosensitive composition for far UV and pattern-forming method using the same
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 49pp.

CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1701214	A1	20060913	EP 2006-4947	20060310
	EP 1701214	B1	20080423		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 20060204890	A1	20060914	US 2006-370983	20060309
	JP 2006285228	A	20061019	JP 2006-66355	20060310
	AT 393413	T	20080515	AT 2006-4947	20060310
PRAI	JP 2005-68920	A	20050311		

OS MARPAT 145:345253
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:238217 CA <<LOGINID::20080627>>
TI Positive-working resist composition and method for resist pattern formation
IN Takeshita, Masaru
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 57pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006082740	A1	20060810	WO 2006-JP301127	20060125
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006215068	A	20060817	JP 2005-24869	20050201
	CN 101107567	A	20080116	CN 2006-80003225	20060125
	KR 2007101316	A	20071016	KR 2007-718291	20070809
PRAI	JP 2005-24869	A	20050201		
	WO 2006-JP301127	W	20060125		

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:198789 CA <<LOGINID::20080627>>
TI Photosensitive composition, compound for use in the photosensitive composition and pattern forming method using the photosensitive

composition
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 87 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1684116	A2	20060726	EP 2006-1308	20060123
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006201711	A	20060803	JP 2005-15965	20050124
	US 20060166135	A1	20060727	US 2006-335679	20060120
	KR 2006085595	A	20060727	KR 2006-7264	20060124
PRAI	JP 2005-15965	A	20050124		

OS MARPAT 145:198789

L4 ANSWER 50 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 145:92995 CA <<LOGINID::20080627>>
TI Positive resist compositions for far UV exposure and method for their patterning
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006178172	A	20060706	JP 2004-371122	20041222
PRAI	JP 2004-371122		20041222		

L4 ANSWER 51 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:400987 CA <<LOGINID::20080627>>
TI Outgassing analysis in EUV resist
AU Hada, Hideo; Watanabe, Takeo; Kinoshita, Hiroo; Komano, Hiroji
CS New Technology Development Section, Tokyo Ohka Kogyo Co., Ltd., Kanagawa, 253-0114, Japan
SO Journal of Photopolymer Science and Technology (2005), 18(4), 475-480
CODEN: JSTEEW; ISSN: 0914-9244
PB Technical Association of Photopolymers, Japan
DT Journal
LA English
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 52 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:379106 CA <<LOGINID::20080627>>
TI Positive-working photoresist composition and method for pattern formation using the same
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 76 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006098740	A	20060413	JP 2004-284810	20040929
PRAI JP 2004-284810		20040929		

L4 ANSWER 53 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:378928 CA <<LOGINID::20080627>>
TI Resist development status for immersion lithography
AU Tsuji, Hiromitsu; Yoshida, Masaaki; Ishizuka, Keita; Hirano, Tomoyuki; Endo, Kotaro; Ohmori, Katsumi
CS Advanced Material Development Division I, Tokyo Ohka Kogyo Co., Ltd., Kanagawa, 253-0114, Japan
SO Journal of Photopolymer Science and Technology (2005), 18(5), 641-645
CODEN: JSTEEW; ISSN: 0914-9244
PB Technical Association of Photopolymers, Japan
DT Journal
LA English
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 54 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:321520 CA <<LOGINID::20080627>>
TI Electron-beam or EUV (extreme ultraviolet) resist composition and process for the formation of resist patterns
IN Hada, Hideo; Shiono, Daiju; Kinoshita, Hiroo; Watanabe, Takeo
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006027997	A1	20060316	WO 2005-JP16013	20050901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006078760	A	20060323	JP 2004-262488	20040909
EP 1791024	A1	20070530	EP 2005-781331	20050901
R: DE, FR, IT				
US 20070269744	A1	20071122	US 2007-573884	20070216
KR 2007040831	A	20070417	KR 2007-705189	20070305
PRAI JP 2004-262488	A	20040909		
WO 2005-JP16013	W	20050901		

OS MARPAT 144:321520
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 55 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:283218 CA <<LOGINID::20080627>>
TI Positive resist composition and pattern forming method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 61 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1630607	A2	20060301	EP 2005-18577	20050826
	EP 1630607	A3	20070509		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006091830	A	20060406	JP 2005-68921	20050311
	US 20060046190	A1	20060302	US 2005-210672	20050825
	US 7291441	B2	20071106		
PRAI	JP 2004-246995	A	20040826		
	JP 2005-68921	A	20050311		

L4 ANSWER 56 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:243392 CA <<LOGINID::20080627>>
TI Photosensitive composition and patterning method
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 123 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006047533	A	20060216	JP 2004-226389	20040803
PRAI	JP 2004-226389		20040803		
OS	MARPAT 144:243392				

L4 ANSWER 57 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 144:160276 CA <<LOGINID::20080627>>
TI Resist composition containing specific acid generator and method of forming resist pattern by immersion photolithography
IN Tsuji, Hiromitsu; Utsumi, Yoshiyuki
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006008914	A1	20060126	WO 2005-JP11737	20050627

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

	JP 2006058842	A	20060302	JP 2005-52032	20050225
	TW 279646	B	20070421	TW 2005-94121941	20050629
PRAI	JP 2004-215404	A	20040723		
	JP 2005-52032	A	20050225		

OS MARPAT 144:160276

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 58 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 143:485829 CA <<LOGINID::20080627>>
TI Chemically-amplified positive-working photosensitive compositions, polymers and their monomers for the compositions, and method for their patterning
IN Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005326609	A	20051124	JP 2004-144470	20040514
PRAI JP 2004-144470		20040514		

OS MARPAT 143:485829

L4 ANSWER 59 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 143:449371 CA <<LOGINID::20080627>>
TI Positive photoresist composition for immersion exposure and patterning method
IN Kanda, Hiromi; Kanna, Shinichi; Inabe, Haruki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005309376	A	20051104	JP 2005-713	20050105
PRAI JP 2004-90354	A	20040325		

L4 ANSWER 60 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 143:413410 CA <<LOGINID::20080627>>
TI Development of fast-photospeed chemically amplified resist in extreme

ultraviolet lithography
AU Watanabe, Takeo; Hada, Hideo; Lee, Seung Yoon; Kinoshita, Hiroo; Hamamoto, Kazuhiro; Komano, Hiroshi
CS Laboratory of Advanced Science and Technology for Industry, University of Hyogo, Hyogo, 678-1205, Japan
SO Japanese Journal of Applied Physics, Part 1: Regular Papers, Brief Communications & Review Papers (2005), 44(7B), 5866-5870
CODEN: JAPNDE
PB Japan Society of Applied Physics
DT Journal
LA English
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 61 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 143:219455 CA <<LOGINID::20080627>>
TI Chemically-amplified far-UV positive photoresists and negative photoresists, and their patterning method
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005221721	A	20050818	JP 2004-29068	20040205
	US 20050266336	A1	20051201	US 2005-41748	20050125
	EP 1566692	A1	20050824	EP 2005-2140	20050202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
PRAI	JP 2004-29068	A	20040205		

OS MARPAT 143:219455

L4 ANSWER 62 OF 65 CA COPYRIGHT 2008 ACS on STN
AN 143:86703 CA <<LOGINID::20080627>>
TI Photoresist composition and method for forming resist pattern
IN Tsuji, Hiromitsu; Endo, Kotaro
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005057284	A1	20050623	WO 2004-JP17719	20041129
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,				

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            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
            SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
     JP 2005172949       A     20050630    JP 2003-409500          20031208
     US 20070148581      A1    20070628    US 2006-581777          20060606
PRAI JP 2003-409500      A     20031208
     WO 2004-JP17719     W     20041129
OS   MARPAT 143:86703
RE.CNT  18    THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 63 OF 65  CA  COPYRIGHT 2008 ACS on STN
AN   143:86696  CA <<LOGINID::20080627>>
TI   Positive resist composition and method for forming resist pattern
IN   Hada, Hideo; Takeshita, Masaru; Hayashi, Ryotaro; Matsumaru, Syogo
PA   Tokyo Ohka Kogyo Co., Ltd., Japan
SO   PCT Int. Appl., 42 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2005057287       A1     20050623    WO 2004-JP18189         20041207
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     JP 2005173468       A     20050630    JP 2003-416584          20031215
     TW 286670           B     20070911    TW 2004-93138146        20041209
PRAI JP 2003-416584      A     20031215
OS   MARPAT 143:86696
RE.CNT  13    THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 64 OF 65  CA  COPYRIGHT 2008 ACS on STN
AN   142:454316  CA <<LOGINID::20080627>>
TI   Chemically amplified photoresist composition and method for forming resist
     pattern
IN   Hada, Hideo; Takeshita, Masaru; Hayashi, Ryotaro; Matsumaru, Syogo;
     Hirayama, Taku; Shimizu, Hiroaki
PA   Tokyo Ohka Kogyo Co., Ltd., Japan
SO   PCT Int. Appl., 43 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2005040922       A1     20050506    WO 2004-JP15504         20041020
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         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG

     JP 2005196095       A     20050721    JP 2004-57448          20040302
     KR 801050           B1    20080204    KR 2006-707537         20060419
     US 20070275307      A1    20071129    US 2007-576405         20070430
PRAI JP 2003-363521      A     20031023
     JP 2003-410489      A     20031209
     JP 2004-57448       A     20040302
     WO 2004-JP15504     W     20041020
OS   MARPAT 142:454316
RE.CNT  10    THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 65 OF 65  CA  COPYRIGHT 2008 ACS on STN
AN   142:65308  CA <<LOGINID::20080627>>
TI   Resin and chain transfer agent for photoresist composition, photoresist
     composition and method for forming resist pattern
IN   Hada, Hideo; Takeshita, Masaru; Matsumaru, Syogo; Shimizu, Hiroaki
PA   Tokyo Ohka Kogyo Co., Ltd., Japan
SO   PCT Int. Appl., 42 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    -------------------    --------
PI   WO 2004108780       A1     20041216    WO 2004-JP8004         20040602
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG

     JP 2005206775       A     20050804    JP 2004-57449          20040302
     US 20070065748      A1    20070322    US 2005-557694         20051122
PRAI JP 2003-160478      A     20030605
     JP 2003-428853      A     20031225
     JP 2004-57449       A     20040302
     WO 2004-JP8004      W     20030602
RE.CNT  12    THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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=> FIL STNGUIDE
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     78.99     174.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                      0.00      -0.80

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jun 20, 2008 (20080620/UP).

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                      0.48     174.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                      0.00      -0.80

FILE 'REGISTRY' ENTERED AT 08:39:45 ON 27 JUN 2008
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STRUCTURE FILE UPDATES:   26 JUN 2008  HIGHEST RN 1031085-65-0
DICTIONARY FILE UPDATES:  26 JUN 2008  HIGHEST RN 1031085-65-0

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 949096-86-0/RN

L5            1 949096-86-0/RN

=> SET NOTICE 1 DISPLAY
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NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.65 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L5   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   808752-25-2  REGISTRY
CN   Sulfonium, triphenyl-, salt with 4,4,5,5,6,6-hexafluorodihydro-4H-1,3,2-
     dithiazine 1,1,3,3-tetraoxide (1:1)  (CA INDEX NAME)
DR     ***949096-86-0***
MF   C18 H15 S . C3 F6 N O4 S2
SR   CA
LC   STN Files:   CA, CAPLUS, USPAT2, USPATFULL
DT.CA  CAplus document type:  Journal; Patent
RL.P   Roles from patents:  PREP (Preparation); PROC (Process); PRP
       (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP  Roles from non-patents:  PROC (Process); PRP (Properties); RACT
       (Reactant or reagent); USES (Uses)

     CM   1

     CRN  146063-77-6
     CMF  C3 F6 N O4 S2


/ Structure 3 in file .gra /


     CM   2

     CRN  18393-55-0
     CMF  C18 H15 S


/ Structure 4 in file .gra /


**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

              65 REFERENCES IN FILE CA (1907 TO DATE)
              65 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> FIL REGISTRY

COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
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                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    2.46     177.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)       SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    0.00      -0.80

FILE 'REGISTRY' ENTERED AT 08:40:20 ON 27 JUN 2008
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STRUCTURE FILE UPDATES:   26 JUN 2008  HIGHEST RN 1031085-65-0
DICTIONARY FILE UPDATES:  26 JUN 2008  HIGHEST RN 1031085-65-0

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on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 146063-77-6/RN

L6            1 146063-77-6/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L6 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.65 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L6   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN     ***146063-77-6***     REGISTRY
CN   4H-1,3,2-Dithiazine, 4,4,5,5,6,6-hexafluorodihydro-, 1,1,3,3-tetraoxide,
     ion(1-) (9CI)  (CA INDEX NAME)
MF   C3 F6 N O4 S2
CI   COM
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  USES (Uses)
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/ Structure 5 in file .gra /

               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> s 146063-77-6/rn
L7            1 146063-77-6/RN

=> d l7

L7   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN     ***146063-77-6***    REGISTRY
ED   Entered STN:  19 Feb 1993
CN   4H-1,3,2-Dithiazine, 4,4,5,5,6,6-hexafluorodihydro-, 1,1,3,3-tetraoxide,
     ion(1-) (9CI)  (CA INDEX NAME)
MF   C3 F6 N O4 S2
CI   COM
SR   CA
LC   STN Files:   CA, CAPLUS


/ Structure 6 in file .gra /

               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=>  FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       4.46     181.54

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -0.80

FILE 'REGISTRY' ENTERED AT 08:41:00 ON 27 JUN 2008
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STRUCTURE FILE UPDATES:   26 JUN 2008  HIGHEST RN 1031085-65-0
DICTIONARY FILE UPDATES:  26 JUN 2008  HIGHEST RN 1031085-65-0
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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L7 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L8 1 146063-77-6/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.55	182.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.80

FILE 'CAPLUS' ENTERED AT 08:41:04 ON 27 JUN 2008
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FILE COVERS 1907 - 27 Jun 2008 VOL 149 ISS 1
FILE LAST UPDATED: 26 Jun 2008 (20080626/ED)

Caplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> S L8

L9 1 L8

=> DIS L9 1 TI

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
TI Thermal-resistant solid electrolytic capacitors and manufacturing
capacitors thereof

=> DIS L9 1 TI

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
TI Thermal-resistant solid electrolytic capacitors and manufacturing
capacitors thereof

=> DIS L9 1 IALL
THE ESTIMATED COST FOR THIS REQUEST IS 3.27 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1026115 CAPLUS <<LOGINID::20080627>>
DOCUMENT NUMBER: 143:337861
ENTRY DATE: Entered STN: 23 Sep 2005
TITLE: Thermal-resistant solid electrolytic capacitors and manufacturing capacitors thereof
INVENTOR(S): Yamaguchi, Hiroshi; Tamura, Masaaki; Yamamoto, Hideo
PATENT ASSIGNEE(S): Japan Carlit Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
INT. PATENT CLASSIF.:
MAIN: H01G009-028
SECONDARY: H01G009-00
CLASSIFICATION: 76-10 (Electric Phenomena)
Section cross-reference(s): 38
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2005259808		A	20050922	JP 2004-66041	20040309
PRIORITY APPLN. INFO.:				JP 2004-66041	20040309

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005259808	ICM	H01G009-028
	ICS	H01G009-00
	IPCI	H01G0009-028 [ICM,7]; H01G0009-022 [ICM,7,C*]; H01G0009-00 [ICS,7]
	IPCR	H01G0009-00 [I,A]; H01G0009-00 [I,C*]; H01G0009-022 [I,C*]; H01G0009-028 [I,A]

GRAPHIC IMAGE:

/ Structure 7 in file .gra /

ABSTRACT:
The title electrolytic capacitor comprises a dielec. oxide-coated valve metal, a solid electrolyte provided on the dielec. oxide layer, and a cathode layer formed on the electrolyte, wherein (1) the electrolyte is a conductive polymer contg. cyclic perfluoroalkylenesulfoneimide anion (I: n = 2-8 int.) as a dopant and (2) the conductive polymer is polypyrrole and/or poly(3,4-ethylenedioxythiophene). The polymer electrolyte gives the capacitors increased thermal resistance and elec. characteristics.

SUPPL. TERM: perfluoroalkylenesulfoneimide anion dopant polypyrrole conductor electrolyte capacitor thermal resistance; polyethylenedioxythiophene conductor perfluoroalkylenesulfoneimide anion dopant electrolyte capacitor thermal resistance

INDEX TERM: Dopants
(1,3-disulfonehexafluoropropyleneimide anion; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: Anions
(1,3-disulfonehexafluoropropyleneimide; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: Conducting polymers
(electrolytes; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: Electric resistance
(equiv.-series; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: Electrolytic capacitors
(solid; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: Dielectric loss
Electric capacitance
Polymer electrolytes
Thermal resistance
(thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: Metals, properties
ROLE: DEV (Device component use); PRP (Properties); USES

(Uses)
(valve, dielec. oxide coated; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: 19090-60-9, Ammonium adipate
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(anodization agent; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: 30604-81-0, Polypyrrole 126213-51-2, Poly(3,4-ethylenedioxythiophene)
ROLE: PRP (Properties)
(conductive polymer, contg. imide anion; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: ***146063-77-6***
ROLE: MOA (Modifier or additive use); USES (Uses)
(dopant; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: 864962-07-2
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(doping agent; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

INDEX TERM: 7429-90-5, Aluminum, properties
ROLE: DEV (Device component use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(surface anodization of; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

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Uploading
=>
=> C:\Program Files\Stnexp\Queries\sulfonium.str

L10 STRUCTURE UPLOADED

=> s l10
*** REGlstRY INITIATED ***
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 09:13:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4 TO 200
PROJECTED ANSWERS: 1 TO 80

L11 1 SEA SSS SAM L10

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L12           1 L11

=> d l11
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y



L11  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   934186-99-9  REGISTRY
ED   Entered STN:  02 May 2007
CN   1-Azoniabicyclo[2.2.2]octane, 1-[2-[(2-methyl-1-oxo-2-propen-1-
     yl)oxy]ethyl]-, salt with 4,4,5,5,6,6-hexafluorodihydro-4H-1,3,2-
     dithiazine 1,1,3,3-tetraoxide (1:1), polymer with hexahydro-2-oxo-3,5-
     methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate,
     3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and
     2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate  (CA INDEX
     NAME)
MF   (C15 H22 O2 . C14 H20 O3 . C13 H22 N O2 . C12 H14 O4 . C3 F6 N O4 S2)x
CI   PMS
PCT  Polyacrylic, Polyother
SR   CA
LC   STN Files:   CA, CAPLUS

     CM   1

     CRN  254900-07-7
     CMF  C12 H14 O4


/ Structure 8 in file .gra /


     CM   2

     CRN  177080-67-0
     CMF  C15 H22 O2


/ Structure 9 in file .gra /


     CM   3

     CRN  115372-36-6
     CMF  C14 H20 O3


/ Structure 10 in file .gra /


     CM   4

     CRN  934186-98-8
     CMF  C13 H22 N O2 . C3 F6 N O4 S2
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          CM   5

          CRN  934186-97-7
          CMF  C13 H22 N O2


/ Structure 11 in file .gra /


          CM   6

          CRN  146063-77-6
          CMF  C3 F6 N O4 S2


/ Structure 12 in file .gra /

               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> s 146063-77-6/crn
    *** REGIstRY INITIATED ***
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




L14         116 L13

=> d l14

L14  ANSWER 1 OF 116  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2008:669549  CAPLUS <<LOGINID::20080627>>
DN   149:21047
TI   Immersion photolithography, their photoresist compositions, and polyvalent
     sulfonium salts therefor
IN   Wada, Kenji
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 96pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   JP 2008129433        A     20080605    JP 2006-315859         20061122
PRAI JP 2006-315859              20061122


=> d l 1-116
'L' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
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The following are valid formats:

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ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs
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To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):all

L14 ANSWER 1 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:669549 CAPLUS <<LOGINID::20080627>>
DN 149:21047
ED Entered STN: 05 Jun 2008
TI Immersion photolithography, their photoresist compositions, and polyvalent sulfonium salts therefor
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 96pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008129433	A	20080605	JP 2006-315859	20061122
PRAI JP 2006-315859		20061122		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008129433	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE00; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CC20; 2H025/FA12; 2H025/FA17

AB The title compns., giving sharp patterns with good collapse resistance and square profile, contain polyvalent sulfonium salts (Y1Y2Y3S+)nA.cntdot.(Xn2-)n1 [Y1-Y3 = heteroatom-bearing atom. group, (cyclo)alkyl, aryl, alkenyl; A = n-valent bridging group; n1, n2 = 1-6; Xn2- = n2-valent nucleophilic anion; n = 2-6; n1 .times. n2 = n].
ST immersion photolithog polyvalent sulfonium photoacid generator; pyrrole indole carbazole substituted sulfonium PAG immersion lithog; pattern squareness collapse prevention EUV immersion photoresist PAG
IT Photoresists
(EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)
IT 464916-31-2P 464916-32-3P 885622-31-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)
IT 405509-21-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)
IT 91-13-4, .alpha.,.alpha.'-Dibromo-o-xylene 120-72-9, Indole, reactions 626-15-3, .alpha.,.alpha.'-Dibromo-m-xylene 1600-44-8, Tetramethylene

sulfoxide 18226-42-1, 1,3,5-Tris(bromomethyl)benzene 29420-49-3, Potassium nonafluorobutanesulfonate 94545-16-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)

IT 24979-69-9 249743-11-1 321164-59-4 345970-25-4 364736-22-1 364736-31-2 460754-13-6 607357-61-9 610300-93-1 690258-44-7 808752-26-3 848408-51-5 848408-52-6 881659-13-8 902118-47-2 911849-54-2 926668-01-1 926668-17-9 926668-18-0 938169-47-2 1029135-50-9
RL: TEM (Technical or engineered material use); USES (Uses)
(EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)

IT 1029135-52-1 1029135-53-2 1029135-55-4 1029135-56-5 1029135-57-6 1029135-58-7 1029135-59-8 1029135-60-1 1029135-61-2 1029135-62-3 ***1029135-63-4*** 1029135-64-5 1029135-65-6 1029135-66-7 1029135-67-8 1029135-68-9 1029135-70-3 1029135-72-5 1029135-74-7 1029135-76-9 1029135-77-0 1029135-79-2 1029135-81-6 ***1029135-83-8*** 1029135-84-9 1029135-85-0 1029135-87-2 1029135-89-4 1029135-91-8 ***1029135-92-9***
RL: CAT (Catalyst use); USES (Uses)
(photoacid generators; EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)

IT 1029135-39-4P 1029135-42-9P 1029135-44-1P 1029135-47-4P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(photoacid generators; EUV photoresists contg. pyrrole-, indole-, or carbazole-substituted sulfonium salts as photoacid generators for immersion lithog.)

L14 ANSWER 2 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:669530 CAPLUS <<LOGINID::20080627>>
DN 149:21046
ED Entered STN: 05 Jun 2008
TI Chemically amplified far-UV positive photoresist compositions, and their patterning method
IN Saegusa, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008129343	A	20080605	JP 2006-314466	20061121
PRAI JP 2006-314466		20061121		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008129343	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BF03;

2H025/BF15; 2H025/BG00; 2H025/CC20; 2H025/FA12;
2H025/FA17

AB The photoresist compns. contain (A) resins which decomp. by acid action and increase soly. in alk. developers, (B) photoacid generators, and (C) nonpolymeric compds. which decomp. and release hydroxy or ether compds. by acid action and increase soly. in alk. developers. The compns. can provide sharp edge patterns with .ltoreq.100 nm width regardless of the degree of d. or isolation of the patterns.

ST far UV pos photoresist photoacid sensitive dissoln accelerator

IT Positive photoresists
(far-UV; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 258879-87-7P, .gamma.-Butyrolactone methacrylate-3-hydroxyadamantyl 1-methacrylate-2-methyl-2-adamantyl methacrylate copolymer 340964-38-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 610300-93-1 690258-44-7 738590-44-8 870450-71-8 903905-37-3
926668-17-9 929197-01-3 935536-42-8 938173-86-5 1026792-33-5
RL: TEM (Technical or engineered material use); USES (Uses)
(chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 19800-27-2 1029101-00-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of photoacid-sensitive carboxy compd.-releasing dissoln. accelerators for pos. photoresists)

IT 144317-44-2 209482-18-8 241806-75-7 284474-28-8 474516-38-6
680200-03-7 ***808752-25-2*** 852572-15-7 863024-59-3
879180-00-4
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)
(photoacid generators; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 1029100-94-4P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(photoacid-sensitive dissoln. accelerators; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

IT 1029100-90-0 1029100-91-1 1029100-92-2 1029100-93-3 1029100-95-5
1029100-96-6 1029100-97-7 1029100-98-8 1029100-99-9 1029101-01-6
RL: MOA (Modifier or additive use); USES (Uses)
(photoacid-sensitive dissoln. accelerators; chem. amplified pos. photoresist compns. contg. photoacid-sensitive dissoln. accelerators)

L14 ANSWER 3 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:609501 CAPLUS <<LOGINID::20080627>>
DN 148:572489
ED Entered STN: 22 May 2008
TI Positively working photosensitive resin compositions, esters, and their nanometer-sized pattern formation
IN Saegusa, Hiroshi; Kodama, Kunihiko; Tsubaki, Hideaki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 60pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008116720	A	20080522	JP 2006-300263	20061106
PRAI	JP 2006-300263		20061106		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008116720	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; C07C0069-75 [I,A]; C07C0069-00 [I,C*]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BF02; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CC20; 2H025/FA12; 2H025/FA17; 4H006/AA01; 4H006/AB76; 4H006/BJ20; 4H006/BJ30; 4H006/BT12; 4H006/BT22

AB The pos. working photosensitive resin compns. contain (A) resins which are decompd. by acids and whose soly. in alkali developers increase, (B) compds. which generate acids upon actinic ray or radiation irradn., and (C) non-polymer esters X(ACO2CRa1Ra2Ra3)m (m .gtoreq.2 integer; X = m-valent org. group; Ra1-Ra3 = H, alkyl, alicyclic, aryl, aralkyl; .gtoreq.1 of Ra1-Ra3 is alicyclic; A = single bond, divalent linkage). Preferably, resins A further contain repeating units having acid-labile groups with alicyclic hydrocarbon structures. More preferably, resins A further contain repeating units having lactone structures. The pattern formation method involves film formation of the pos. working photosensitive resin compns., followed by irradiating light and development of the obtained photosensitive film. Light of wavelength .ltoreq.250 nm, preferably, .ltoreq.220 nm, electron beam, etc. are suitable for the pos. working photosensitive compns. and give .ltoreq.100-nm fine patterns with good profiles.

ST pos working photoresist compn acid labile ester

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(Troysol S 366; pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fluorine-contg., Megafac R 08; pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyoxyalkylene-, KP 341; pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polysiloxane-, KP 341; pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT Fluoropolymers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polysiloxane-, Megafac R 08; pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT Positive photoresists
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT Esters, uses

RL: MOA (Modifier or additive use); USES (Uses)
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT 690258-44-7P 870450-71-8P 873546-13-5P 881659-13-8P 926668-17-9P 929197-00-2P 929197-01-3P 938173-86-5P 1026792-33-5P 1026792-35-7P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(assumed monomers; pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT 102-71-6, Triethanolamine, uses 120-07-0, N-Phenyldiethanolamine 716-79-0, 2-Phenylbenzimidazole 19600-49-8, Triphenylsulfonium acetate 24544-04-5, 2,6-Diisopropylaniline 70384-51-9 144116-10-9 144317-44-2 197447-16-8 209482-18-8 241806-75-7 258872-05-8 389859-76-1 474516-38-6 610301-07-0 680200-03-7 ***808752-25-2*** 852572-15-7 863024-59-3 879180-00-4
RL: CAT (Catalyst use); USES (Uses)
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT 258879-87-7P, .gamma.-Butyrolactone methacrylate-3-hydroxyadamantyl 1-methacrylate-2-methyl-2-adamantyl methacrylate copolymer 340964-38-7P 1008529-09-6P, Acetoxystyrene-1-phenylethyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT 137462-24-9, Megafac F 176 1026778-67-5 1026778-68-6 1026778-69-7 1026778-71-1 1026778-72-2 1026778-73-3 1026778-74-4 1026778-75-5 1026778-77-7 1026778-78-8 1026778-79-9 1026778-84-6 1026778-85-7
RL: MOA (Modifier or additive use); USES (Uses)
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT 96-48-0, .gamma.-Butyrolactone 97-64-3, Ethyl lactate 108-94-1, Cyclohexanone, uses 1320-67-8, Propylene glycol methyl ether 84540-57-8, Propylene glycol methyl ether acetate
RL: NUU (Other use, unclassified); USES (Uses)
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

IT 25357-95-3, 1,3,5-Cyclohexanetricarboxylic acid 124980-28-5 1026778-81-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos. working photosensitive resin compns., esters, and their nanometer-sized pattern formation)

L14 ANSWER 4 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:549081 CAPLUS <<LOGINID::20080627>>
DN 148:526570
ED Entered STN: 08 May 2008
TI Positive-working photosensitive composition and method of forming pattern
IN Yamaguchi, Shuhei; Kodama, Kunihiko; Tsubaki, Hideaki; Taguchi, Norihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008107793	A	20080508	JP 2007-214913	20070821
PRAI	JP 2006-260430	A	20060926		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008107793	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0020-34 [I,A]; C08F0020-00 [I,C*]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA12; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/BA03Q; 4J100/BA11P; 4J100/BA15Q; 4J100/BA40P; 4J100/BC09Q; 4J100/BC53P; 4J100/CA04; 4J100/CA05; 4J100/CA06; 4J100/JA38

GI

/ Structure 13 in file .gra /

AB Disclosed ia a pos.-working photosensitive compn. coprinsing (a) a photoacid and (b) a resin which increases soly in in an alkali developer upon interaction with an acid and contains an acid-decomposable unit I (Xal = H, alkyl, cyano, halo; Ryl = alkyl, cycloalkyl; Zl = at. group forming alicyclic hydrocarbon; and Z = divalent linking group) and a unit having lactone and cyano groups. The pos.-working photosensitive compn. is used as a far-UV photoresist and an electron-beam resist in semiconductor device fabrication.

ST pos photosensitive compn photoresists resist electron beam photolithog; semiconductor device fabrication patterning

IT Electron beam resists
Photolithography
Semiconductor device fabrication
(Pos.-working photosensitive compn. for far-UV photoresist and electron-beam resist)

IT Photoresists
(far-UV; Pos.-working photosensitive compn. for far-UV photoresist and electron-beam resist)

IT 1022914-47-1P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Pos.-working photosensitive compn. for far-UV photoresist and electron-beam resist)

IT 1022914-48-2 1022914-49-3 1022914-52-8 1022914-53-9 1022914-54-0 1022914-55-1 1022914-56-2 1022914-84-6
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(Pos.-working photosensitive compn. for far-UV photoresist and electron-beam resist)

IT 869496-41-3 926668-15-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer; prepn. of alkaliosol. resin for far-UV photoresist and electron-beam resist)

IT 209482-18-8 284474-28-8 301664-71-1 309751-48-2 479628-12-1

808752-25-2 852572-15-7 863024-59-3
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid; Pos.-working photosensitive compn. for far-UV photoresist and electron-beam resist)

L14 ANSWER 5 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:548525 CAPLUS <<LOGINID::20080627>>
DN 148:526566
ED Entered STN: 08 May 2008
TI Photosensitive resin composition containing arylsulfonium salt and method for pattern formation using the same
IN Kodama, Kunihiko; Tsuchimura, Toshitaka; Saegusa, Hiroshi; Tsubaki, Hideaki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 59pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008107377	A	20080508	JP 2006-287220	20061023
US 20080138742	A1	20080612	US 2007-876945	20071023
PRAI JP 2006-287220	A	20061023		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008107377	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/FA12; 2H025/FA17
US 20080138742	IPCI	G03F0007-039 [I,A]; C07C0381-12 [I,A]; C07C0381-00 [I,C*]; G03F0007-26 [I,A]
	NCL	430/281.100; 430/326.000

AB The title compn. contains an arylsulfonium salt having a polycyclic hydrocarbon cation [(Y2-Y1-)m4-Ar1-]m3-S+(-X1)m1(-X2)m2 X_(Ar1 = aryl; Y1 = single bond, 2-valent connecting group; Y2 = polycyclic hydrocarbon; m1-2 = 0-2; m3 = 1-3; m1+m2+m3 = 3; X_ = anion) as an acid generator. The compn. is suitable for manufg. semiconductor device fabrication , liq. crystal display fabrication, thermal head fabrication, etc.
ST photosensitive resin compn arylsulfonium salt acid generator
IT Acids, preparation
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(acid precursors; acid generator in photosensitive resin compn. contg.)
IT Photoresists
(permanent photoresists; photosensitive resin compn. contg. arylsulfonium salt and method for pattern formation using the same)
IT Photoimaging materials
Photolithography
(photosensitive resin compn. contg. arylsulfonium salt and method for pattern formation using the same)
IT 1022945-60-3P 1022945-62-5P 1022945-64-7P 1022945-65-8P
1022945-67-0P 1022945-69-2P 1022945-70-5P ***1022945-71-6P***

1022945-73-8P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(acid generator in photosensitive resin compn. contg.)

IT 71-43-2, Benzene, reactions 375-73-5, Nonafluorobutanesulfonic acid 768-90-1, 1-Bromoadamantane 945-51-7, Diphenyl sulfoxide 29420-49-3, Potassium Nonafluorobutanesulfonate 1022945-58-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(acid generator in photosensitive resin compn. contg.)

IT 780-68-7P, 1-Phenyl adamantane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(acid generator in photosensitive resin compn. contg.)

L14 ANSWER 6 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:471192 CAPLUS <<LOGINID::20080627>>
DN 148:483222
ED Entered STN: 17 Apr 2008
TI Positive-working resist composition and method for pattern formation using the same
IN Hirano, Shuji; Kawanishi, Yasuhiro; Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 89pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008090261	A	20080417	JP 2007-47090	20070227
PRAI	JP 2006-52953	A	20060228		
	JP 2006-239281	A	20060904		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008090261	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0012-22 [I,A]; C08F0012-00 [I,C*]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AD03; 2H025/BE07; 2H025/BF15; 2H025/BG00; 2H025/BJ04; 2H025/CC04; 2H025/CC20; 2H025/FA17; 4J100/AB07P; 4J100/AB07Q; 4J100/AB07R; 4J100/AJ02Q; 4J100/AL03R; 4J100/AL08R; 4J100/BA02P; 4J100/BA02R; 4J100/BA03P; 4J100/BA03Q; 4J100/BA12P; 4J100/BA13P; 4J100/BA14P; 4J100/BA15P; 4J100/BA15R; 4J100/BA16P; 4J100/BA16Q; 4J100/BA20P; 4J100/BA20R; 4J100/BA22R; 4J100/BA35P; 4J100/BA40P; 4J100/BA40Q; 4J100/BA41P; 4J100/BA41Q; 4J100/BA41R; 4J100/BA51P; 4J100/BA56Q; 4J100/BB01P; 4J100/BB03P; 4J100/BB18P; 4J100/BB18R; 4J100/BC04R; 4J100/BC09R; 4J100/BC43P; 4J100/BC43R; 4J100/CA01; 4J100/CA04; 4J100/CA05; 4J100/CA06; 4J100/DA01; 4J100/FA03; 4J100/FA19; 4J100/FA28; 4J100/JA38

GI

/ Structure 14 in file .gra /

AB The title compn. contains an acid-sensitive alkali-solubilizable resin and an actinic ray- or radiation-sensitive acid-generator, wherein the resin has repeating unit I(X, Y = H, org. group; Z = acid-insensitive group; Ra-d = H, alkyl, halo, etc.; m,n = integer 1-4; k = integer 0-3; 2.ltoreq.m+n+k.ltoreq.5) and wherein the acid generator contains sulfonium cation II(R1-13 = H, substituent; Z = single bond, 2-valent connecting group). The compn. provides pattern of improved line edge roughness.

ST pos resist compn acid generator resin

IT Acids, preparation
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid precursor; pos.-working resist compn. and method for pattern formation using the same)

IT Electron beam lithography
Electron beam resists
Photoimaging materials
Photolithography
Photoresists
X-ray lithography
X-ray resists
(pos.-working resist compn. and method for pattern formation using the same)

IT 99-90-1, 4'-Bromoacetophenone 147-93-3, Thiosalicylic acid 375-73-5, Nonafluorobutanesulfonic acid 492-22-8, 9H-Thioxanthen-9-one 25601-74-5, 3,5-Bis(trifluoromethyl)benzenesulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(acid generator in pos.-working resist compn.)

IT 906553-07-9P 906553-08-0P 906553-11-5P 906553-27-3P 906553-29-5P 906553-51-3P 906553-63-7P ***906553-67-1P*** 906553-80-8P 910917-70-3P 910917-73-6P 910917-75-8P 910917-77-0P 910917-78-1P 910917-80-5P 910917-81-6P 910917-83-8P 910917-85-0P 910917-91-8P 910917-92-9P 910918-00-2P 910918-02-4P 945617-69-6P 945617-70-9P ***1019992-69-8P*** 1019992-82-5P 1019992-91-6P 1019992-94-9P 1019992-97-2P 1019993-01-1P 1019993-05-5P ***1019993-09-9P*** 1019993-12-4P 1019993-15-7P 1019993-18-0P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid generator in pos.-working resist compn.)

IT 109-53-5DP, reaction product with hydroxystyrene deriv. polymer 109-92-2DP, reaction product with hydroxystyrene deriv. polymer 764-47-6DP, reaction product with hydroxystyrene deriv. polymer 1663-35-0DP, reaction product with hydroxystyrene deriv. polymer 2182-55-0DP, reaction product with hydroxystyrene deriv. polymer 61393-04-2DP, hydrolyzed, reaction products with 2,6-ditrifluoromethylphenylethyl vinyl ether 61393-04-2DP, hydrolyzed, reaction products with Et vinyl ether 61393-04-2DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 212555-24-3DP, 4-Cyclohexylphenoxyethyl vinyl ether, reaction product with 4-hydroxystyrene deriv. polymer 259655-54-4DP, reaction product with 4-hydroxystyrene deriv. polymer 1019857-53-4DP, hydrolyzed

1019857-56-7DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019991-57-1DP, hydrolyzed, reaction products with Et vinyl ether derivs. 1019991-57-1DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019991-63-9DP, hydrolyzed, tert-butoxycarbonyl esters 1019991-69-5DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019991-75-3DP, hydrolyzed, reaction products with cyclohexyl vinyl ether 1019991-79-7DP, reaction product with 4-hydroxystyrene deriv. polymer 1019991-81-1DP, hydrolyzed, reaction products with cyclohexylcarbonyloxyethyl vinyl ether 1019991-92-4DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019992-04-1DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019992-08-5DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019992-16-5DP, hydrolyzed, reaction products with Pr vinyl ether 1019992-19-8DP, hydrolyzed 1019992-23-4DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019992-27-8DP, hydrolyzed, reaction products with methoxyethyl vinyl ether 1019992-31-4DP, hydrolyzed, reaction products with iso-Bu vinyl ether 1019992-35-8DP, hydrolyzed, reaction products with Et vinyl ether 1019992-39-2DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019992-41-6DP, reaction product with 4-hydroxystyrene deriv. polymer 1019992-46-1DP, hydrolyzed, tert-butoxycarbonylmethyl ether 1019992-49-4DP, hydrolyzed 1019992-53-0DP, hydrolyzed, reaction products with phenylethyl vinyl ether 1019992-56-3DP, hydrolyzed, reaction products with cyclohexylethyl vinyl ether 1019992-56-3DP, hydrolyzed, reaction products with cyclohexylphenylethyl vinyl ether
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in pos.-working resist compn.)

L14 ANSWER 7 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:471088 CAPLUS <<LOGINID::20080627>>
DN 148:483220
ED Entered STN: 17 Apr 2008
TI Positive-working resist composition showing improved sensitivity, resolution, line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication
IN Hirano, Shuji; Kawanishi, Yasuhiro; Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 79pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008089872	A	20080417	JP 2006-269650	20060929
PRAI JP 2006-269650		20060929		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008089872	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; C08F0012-14 [I,A]; C08F0012-00 [I,C*]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AC04; 2H025/AC05;

2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE07;
2H025/BE10; 2H025/BG00; 2H025/CC03; 2H025/CC04;
2H025/CC20; 2H025/FA12; 2H025/FA17; 4J100/AB07P;
4J100/AB07Q; 4J100/AB07R; 4J100/AJ02Q; 4J100/AL08R;
4J100/BA02R; 4J100/BA03P; 4J100/BA03Q; 4J100/BA12P;
4J100/BA15P; 4J100/BA15R; 4J100/BA16P; 4J100/BA16Q;
4J100/BA29P; 4J100/BA40Q; 4J100/BA41P; 4J100/BA41Q;
4J100/BA56Q; 4J100/BB03Q; 4J100/BC09R; 4J100/BC43P;
4J100/CA01; 4J100/CA04; 4J100/CA05; 4J100/CA06;
4J100/DA01; 4J100/FA03; 4J100/JA38

GI

/ Structure 15 in file .gra /

AB The title pos.-working resist compn. comprises an alk.-insol. or hardly-sol. resin having a structural repeating unit I [X = H, org. group; Y = H, org. group; Z = acid nondecomposable group; Ra, Rb, Rc, Rd = H, alkyl, OH, alkoxy, halo, cyano, nitro, acyl, etc.; m = 1-4; n = 1-4; k = 0-3; 2.ltoreq.m+n+k.ltoreq.5; n1 = 0-10] and becoming alk.-sol. upon acid action, and an acid generator (R1)(R2)(R3)S+.X- [R1, R2, R3 = alkyl, cycloalkyl, aryl; compds. R1-H, R2-H, and R3-H have b.ps. of .gtoreq.160.degree.; X- = nonnucleophilic anion] capable of generating acid upon irradn. of actinic ray or radiation.

ST pos working resist compn pattern formation resin acid generator

IT Resists
(pos.-working radiation-sensitive; pos.-working resist compn. showing improved sensitivity, resoln., line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication)

IT Positive photoresists
Semiconductor device fabrication
(pos.-working resist compn. showing improved sensitivity, resoln., line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication)

IT Electron beam resists
X-ray resists
(pos.-working; pos.-working resist compn. showing improved sensitivity, resoln., line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication)

IT 375-73-5, Nonafluorobutanesulfonic acid 2664-63-3, 4,4'-Thiodiphenol
RL: RCT (Reactant); RACT (Reactant or reagent)
(acid generator prepn.; pos.-working resist compn. showing improved sensitivity, resoln., line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication)

IT 247150-86-3P 524699-60-3P ***910918-04-6P*** 910918-06-8P 910918-09-1P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid generator; pos.-working resist compn. showing improved sensitivity, resoln., line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication)

IT 61393-04-2DP, partially hydrolyzed, acetals with (cyclohexylphenoxyethyl) vinyl ether 1019857-53-4DP, hydrolyzed 1019857-56-7DP, partially hydrolyzed, acetals with (cyclohexylphenoxyethyl) vinyl ether

1019991-57-1DP, hydrolyzed, acetals with (cyclohexylphenoxyethyl) vinyl ether 1019991-57-1DP, hydrolyzed, acetals with (cyclohexylphenoxyethyl) vinyl ether
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working resist compn. showing improved sensitivity, resoln., line-edge roughness, and pattern profile and its use for pattern formation in semiconductor device fabrication)

L14 ANSWER 8 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:471036 CAPLUS <<LOGINID::20080627>>
DN 148:437348
ED Entered STN: 17 Apr 2008
TI Radiation-sensitive resists for liquid immersion lithography, their acid generators, and preparation thereof
IN Nagai, Tomoki
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 25pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008089777	A	20080417	JP 2006-268488	20060929
PRAI JP 2006-268488		20060929		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008089777	IPCI	G03F0007-004 [I,A]; C09K0003-00 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BF02; 2H025/BG00; 2H025/CC20; 2H025/FA17

GI

/ Structure 16 in file .gra /

AB The acid generators are I (R1-R3 = aryl, alkyl, essentially including aryl; X = C2-6 fluoroalkylene) and are (i) brought into contact with activated carbon, (ii) washed with pure water, and/or (iii) washed with aq. acids to reduce metal amt. to .ltoreq.100 ppb as each. Photoresists contg. the acid generators are subjected to immersion photolithog. Elution of the acid generators in the immersion liqs. is suppressed.
ST metal contaminant reduced photoacid generator immersion lithog resist; activated carbon acidic rinse processed PAG immersion photoresist
IT Photolithography
(immersion; photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)
IT Photoresists
(photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)
IT 7440-44-0, Activated carbon, uses

RL: NUU (Other use, unclassified); USES (Uses)
(activated, contaminant adsorbents; photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)

IT 3353-89-7 469912-73-0 588668-97-7 753025-62-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of photoacid generators; photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)

IT ***808752-25-2P*** ***862261-50-5P*** ***910606-27-8P***
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(photoacid generators; photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)

IT 7647-01-0, Hydrochloric acid, uses
RL: NUU (Other use, unclassified); USES (Uses)
(photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)

IT 840494-18-0P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(resist polymers; photoresists contg. photoacid generators with min. amt. of metal contaminants for immersion lithog.)

L14 ANSWER 9 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:471032 CAPLUS <<LOGINID::20080627>>
DN 148:437347
ED Entered STN: 17 Apr 2008
TI Radiation-sensitive photoresist compositions for liquid immersion lithography and resist pattern formation using them
IN Nagai, Tomoki
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 23pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008089766	A	20080417	JP 2006-268458	20060929
PRAI JP 2006-268458		20060929		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008089766	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-28 [I,A]; C08F0220-00 [I,C*]
	FTERM	2H025/AA00; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/CB14; 2H025/CB41; 2H025/FA03; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL26P; 4J100/BA04P; 4J100/BA15P; 4J100/BB18P; 4J100/BC03R; 4J100/BC08P; 4J100/BC09Q; 4J100/CA05; 4J100/DA01; 4J100/DA04; 4J100/FA19; 4J100/GA19; 4J100/JA38

AB The compns., useful for semiconductor device fabrication, contain 100

parts resins (A) with acid-labile groups and 0.5-3 parts radiation-sensitive acid generators (B) contg. compds. R1R2R3S+.N-Y (R1-3 = aryl or alkyl; Y = N-contg. ring residue SO2XSO2; X = F-substituted C2-6 alkylene), thus suppressing elution of B into water.

ST radiation sensitive photoresist liq immersion lithog; photoresist sulfonium photoacid generator elution prevention

IT Photolithography
Positive photoresists
(radiation-sensitive photoresist compns. for liq. immersion lithog. without elution of photoacid generators)

IT ***910606-27-8***
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; radiation-sensitive photoresist compns. for liq. immersion lithog. without elution of photoacid generators)

IT 840494-18-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(radiation-sensitive photoresist compns. for liq. immersion lithog. without elution of photoacid generators)

L14 ANSWER 10 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:447243 CAPLUS <<LOGINID::20080627>>
DN 148:459637
ED Entered STN: 10 Apr 2008
TI Positive-working photosensitive composition and method of forming pattern using the same
IN Kodama, Kunihiko; Tsubaki, Hideaki; Taguchi, Norihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 50pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 76

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008083159	A	20080410	JP 2006-260432	20060926
PRAI JP 2006-260432		20060926		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008083159	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0020-10 [I,A]; C08F0020-42 [I,A]; C08F0020-00 [I,C*]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/FA12; 2H025/FA17; 4J100/AJ02S; 4J100/AL03P; 4J100/AL04P; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL08S; 4J100/AL24P; 4J100/AL24Q; 4J100/AL31P; 4J100/AL31Q; 4J100/BA02P; 4J100/BA03Q; 4J100/BA03R; 4J100/BA11S; 4J100/BA15Q; 4J100/BA16S; 4J100/BA20Q; 4J100/BA40Q; 4J100/BA40R; 4J100/BA59S; 4J100/BB18S; 4J100/BC02P; 4J100/BC04P; 4J100/BC07P; 4J100/BC07R; 4J100/BC08P; 4J100/BC08Q; 4J100/BC08S; 4J100/BC12P; 4J100/BC12Q; 4J100/BC53Q; 4J100/BC59Q;

4J100/CA01; 4J100/CA05; 4J100/CA06; 4J100/JA38

AB Disclosed is a pos.-working photosensitive compn. comprising (A) a resin having an acid-decomposable repeating unit [CH-CXa1(COO-Z-COO-CRy1Ry2Ry3)] (Xa1 = H, alkyl, cyano, halo; Ry1-3 = alkyl, cycloalkyl; and Z = divalent linking group) and increasing its soly. in an alkali developer. and (B) an agent (Rb3SO2)(Rb4SO2)NH or (Rb3SO2)(Rb4SO2)(Rb5SO2)CH (Rb3-5 = alkyl, cycloalkyl, aryl) forming acid upon receiving an actinic ray or radiation. The pos.-working photosensitive compn. provides a fine pattern with .ltoreq.100 nm, and is used for manuf. of ICs and thermal heads.

ST pos photosensitive compn photoacid resin integrated circuit thermal head

IT Integrated circuits
Photoresists
Resists
(Pos.-working photosensitive compn. contg. alkali-sol. resin and photoacid)

IT Thermal printers
(heads; Pos.-working photosensitive compn. contg. alkali-sol. resin and photoacid)

IT 870450-71-8P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Pos.-working photosensitive compn. contg. alkali-sol. resin and photoacid)

IT 1017682-45-9 1017682-47-1 1017682-51-7 1017682-53-9 1017682-57-3
1017682-58-4 1017871-86-1 1018438-64-6 1018438-65-7 1018438-67-9
1018438-69-1
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(Pos.-working photosensitive compn. contg. alkali-sol. resin and photoacid)

IT 79-41-4, Methacrylic acid, reactions 115372-36-6 115522-15-1
130668-19-8 177080-67-0 195000-66-9 254900-07-7 436852-34-5
869496-41-3 870450-64-9 926668-15-7 1017682-50-6 1017682-52-8
1017682-56-2 1017871-85-0 1018438-66-8 1018438-68-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer; prepn. of alkali-sol. resin for pos.-working photosensitive compn.)

IT 460731-17-3 460731-18-4 460731-21-9 541547-03-9 ***808752-25-2*** ***862261-67-4*** 879179-84-7
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid; Pos.-working photosensitive compn. contg. alkali-sol. resin and photoacid)

L14 ANSWER 11 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:440955 CAPLUS <<LOGINID::20080627>>
DN 148:437332
ED Entered STN: 10 Apr 2008
TI Positive-working resist composition and method of forming pattern using the same
IN Kato, Takayuki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 65pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008083370	A	20080410	JP 2006-263060	20060927
PRAI	JP 2006-263060		20060927		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008083370	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-26 [I,A]; C08F0220-00 [I,C*]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CC03; 2H025/FA12; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL08S; 4J100/AL08T; 4J100/BA03R; 4J100/BA11P; 4J100/BA11Q; 4J100/BA40P; 4J100/BA40R; 4J100/BC03S; 4J100/BC04Q; 4J100/BC04S; 4J100/BC08R; 4J100/BC08S; 4J100/BC09S; 4J100/BC09T; 4J100/BC53P; 4J100/BC53Q; 4J100/CA03; 4J100/CA06; 4J100/JA38

AB Disclosed is a pos.-working resist compn. comprising (a) a compd. generating acid upon receiving an actinic ray or radiation, (b) a solvent, and (c) a resin contg. all of the following units (1-4): (1) a 1st unit having a lactone structure, (2) a 2nd unit having a lactone structure different from (1), (3) a 3rd unit which has an acrylic acid-decomposable unit, and (4) a 4th unit which has the same units as those in (3), in addn., another acrylic acid-decomposable unit different from those of (3).

ST pos resist compn acid decomposable acrylic polymer

IT Resists
(Pos.-working resist compn. contg. acrylic resin having acid-decomposable group)

IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Pos.-working resist compn. contg. acrylic resin having acid-decomposable group)

IT 1017846-74-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Pos.-working resist compn. contg. acrylic resin having acid-decomposable group)

IT 1017846-76-2 1017846-80-8 1017846-82-0 1017846-85-3 1017846-87-5 1017846-90-0 1017846-94-4 1017846-97-7 1017876-46-8
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(Pos.-working resist compn. contg. acrylic resin having acid-decomposable group)

IT 79-41-4, reactions 76392-14-8 115372-36-6 115522-15-1 115522-17-3 130668-19-8 156938-09-9 177080-67-0 178889-45-7 186585-56-8 209982-56-9 216581-76-9 216581-85-0 242129-35-7 251909-25-8 254900-07-7 266308-58-1 274248-05-4 279218-76-7 280552-09-2 297156-50-4 325991-26-2 329364-88-7 351196-10-6 478854-78-3 482609-91-6 921935-14-0 926668-15-7 935536-41-7 949568-88-1 1017846-73-9 1017846-79-5 1017846-92-2 1017846-93-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer; Pos.-working resist compn. contg. acrylic resin having acid-decomposable group)

IT 398141-19-0 460731-17-3 ***862261-51-6*** 880874-05-5 881192-07-0 935536-48-4 935536-50-8 945684-19-5

RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid; Pos.-working resist compn. contg. acrylic resin having acid-decomposable group)

L14 ANSWER 12 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:419172 CAPLUS <<LOGINID::20080627>>
DN 148:414272
ED Entered STN: 04 Apr 2008
TI Resist composition and pattern forming method using the same
IN Tsuchihashi, Toru; Nishiyama, Fumiyuki; Makino, Masaomi; Mizutani, Kazuyoshi
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 50pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1906240	A2	20080402	EP 2007-18265	20070918
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2008089790	A	20080417	JP 2006-268604	20060929
	US 20080081292	A1	20080403	US 2007-863314	20070928
PRAI	JP 2006-268604	A	20060929		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1906240	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]
JP 2008089790	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BF15; 2H025/BG00; 2H025/CB14; 2H025/CB16; 2H025/CB17; 2H025/CB41; 2H025/CB45; 2H025/FA17
US 20080081292	IPCI	G03C0001-00 [I,A]; G03C0005-00 [I,A]
	NCL	430/287.100; 430/322.000

GI

/ Structure 17 in file .gra /

AB A resist compn. comprises: (A) a resin contg. a repeating unit represented by formula (I); and (B) at least one compd. represented by formula (II) or (III): wherein AR represents a substituted or unsubstituted benzene ring or a substituted or unsubstituted naphthalene ring; Rn represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group or a substituted or unsubstituted aryl group; and A represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a halogen atom, a cyano

group or a substituted or unsubstituted alkyloxycarbonyl group; wherein Rfa and Rfb each independently represents a monovalent org. group having a fluorine atom, and two Rfa's or three Rtb's may be the same or different and may combine with each other to form a ring; and X+ represents a sulfonium cation or an iodonium cation, and a pattern forming method uses the same.

ST resist compn pattern formation

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg.; resist compn. and pattern forming method using the same)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyoxyalkylene-; resist compn. and pattern forming method using the same)

IT Fluoropolymers, uses
Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-; resist compn. and pattern forming method using the same)

IT Photoresists
(resist compn. and pattern forming method using the same)

IT 460731-18-4 ***808752-25-2*** 879180-00-4 1015693-04-5 1015693-05-6 1015693-07-8
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator; resist compn. and pattern forming method using the same)

IT 1008529-09-6P, Acetoxystyrene-1-Phenylethyl methacrylate-styrene copolymer 1008529-10-9P, Acetoxystyrene-1-Phenylethyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resist compn. and pattern forming method using the same)

IT 102-86-3, Tri-n-hexylamine 484-47-9, 2,4,5-Triphenylimidazole 2052-49-5, Tetra(n-butyl)ammonium hydroxide 137462-24-9, Megafac F 176 949567-56-0 949567-57-1 949567-59-3 949567-60-6 949567-61-7 949567-62-8 949567-63-9 949567-64-0 1008529-11-0 1008529-17-6 1008529-20-1 1015693-03-4
RL: TEM (Technical or engineered material use); USES (Uses)
(resist compn. and pattern forming method using the same)

L14 ANSWER 13 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:410599 CAPLUS <<LOGINID::20080627>>
DN 148:390534
ED Entered STN: 03 Apr 2008
TI Optical filter for display device
IN Aizawa, Yasushi; Yano, Kentaro; Ihara, Jun'ichiro; Tamura, Masaaki; Yamaguchi, Yoji
PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan; Japan Carlit Co., Ltd.
SO PCT Int. Appl., 54pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

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PI   WO 2008038569        A1    20080403    WO 2007-JP68276        20070920
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
            CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
            GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
            KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
            MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
            PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
            GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
PRAI JP 2006-264791       A     20060928
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
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 WO 2008038569    IPCI   G02B0005-22 [I,A]; C09B0023-00 [I,A]; C09B0053-00
                         [I,A]; C09B0067-20 [I,A]; C09B0067-00 [I,C*];
                         C09K0003-00 [I,A]; G09F0009-00 [I,A]
                  IPCR   G02B0005-22 [I,C]; G02B0005-22 [I,A]; C09B0023-00
                         [I,C]; C09B0023-00 [I,A]; C09B0053-00 [I,C];
                         C09B0053-00 [I,A]; C09B0067-00 [I,C]; C09B0067-20
                         [I,A]; C09K0003-00 [I,C]; C09K0003-00 [I,A];
                         G09F0009-00 [I,C]; G09F0009-00 [I,A]
AB   Disclosed is an optical filter having excellent light resistance, which
     can block out IR ray and/or Ne light or the like which becomes an obstacle
     to image properties or the like, which can improve image properties of a
     display, and whose properties can be maintained over a long period.
     Specifically disclosed is an optical filter characterized by comprising a
     ionic conjugate of a cyclic disulfonylimide anion with a dye cation.
ST   optical filter plasma display ionic conjugate
IT   Chemical compounds
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ionic; optical filter)
IT   Optical filters
     Optical imaging devices
     Plasma display panels
        (optical filter)
IT   139562-87-1   536741-75-0   ***1014659-00-7***
     RL: TEM (Technical or engineered material use); USES (Uses)
        (optical filter)
RE.CNT  8     THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Minnesota Mining And Manufacturing Co; EP 0731147 A2 1996 CAPLUS
(2) Minnesota Mining And Manufacturing Co; JP 08-253705 A 1996 CAPLUS
(3) Minnesota Mining And Manufacturing Co; US 5541235 A 1996 CAPLUS
(4) Sony Corp; JP 06-300913 A 1994 CAPLUS
(5) The Japan Carlit Co Ltd; EP 1564260 A1 2004 CAPLUS
(6) The Japan Carlit Co Ltd; WO 2004048480 A1 2004 CAPLUS
(7) The Japan Carlit Co Ltd; US 20060073407 A1 2004
(8) The Japan Carlit Co Ltd; JP 2005325292 A 2005 CAPLUS

L14  ANSWER 14 OF 116  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2008:349340  CAPLUS <<LOGINID::20080627>>
DN   148:366573
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ED Entered STN: 21 Mar 2008
TI Positive-working radiation resists containing branched polymers and pattern formation using them
IN Hirano, Shuji; Kawanishi, Yasuhiro; Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 85pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 25, 35, 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008065266	A	20080321	JP 2006-245933	20060911
PRAI JP 2006-245933		20060911		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008065266	IPCI	G03F0007-033 [I,A]; G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB16; 2H025/CB41; 2H025/CB51; 2H025/CC20

AB The resists contain (A) polymers having .gtoreq.2 polymer chains via .gtoreq.1 branching points (e.g., comb, star, hyperbranched polymer) and increasing soly. in alkali developers by acid action, (B) radiation-sensitive acid generators R1bS+R2bR3bX- [R1b-R3b = (cyclo)alkyl, aryl; b.p. of R1bH, R2bH, and R3bH .gtoreq.160.degree. at 1 atm; X- = non-nucleophilic anion], and optionally (C) proton-accepting compds. decreasing proton acceptability or being converted into acidic compds. by radiation irradn. The resists produce high-resoln. images with low line edge roughness independently of postbaking temp.
ST pos radiation resist comb polymer; star polymer pos radiation resist; hyperbranched polymer pos radiation resist; sulfonium salt acid generator radiation resist
IT Dendrimers
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(hyperbranched polymers; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)
IT Catalysts
(photochem., photoacid generators; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)
IT Resists
(radiation-sensitive; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)
IT 1011534-92-1DP, hydrolyzed
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(comb; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)
IT 933054-46-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(core, for star poly(ethoxyethyl)styrene; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 866255-63-2DP, hydrolyzed, reaction product with phenoxyethyl vinyl ether
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(hyperbranched; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 915104-83-5P 953419-77-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(photoacid generator manufd. from; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 63-74-1 109-01-3 144-80-9, Sulfacetamide 375-73-5, Nonafluorobutanesulfonic acid 421-85-2, Trifluoromethanesulfonamide 1135-40-6, N-Cyclohexyl-3-amino propanesulfonic acid 2664-63-3, 4,4'-Thiodiphenol 3353-89-7, Triphenylsulfonium bromide 4897-50-1, 4-Piperidinopiperidine 7795-95-1, 1-Octanesulfonyl chloride 10191-18-1 68399-77-9 82727-16-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(photoacid generator manufd. from; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 72566-65-5P 866255-59-6P 866255-61-0P 1011709-87-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 4442-79-9DP, 2-Cyclohexaneethanol, reaction product with hydrolyzed ethoxyethylstyrene star polymer 18370-86-0DP, 2-Phenoxyethyl vinyl ether, reaction product with hydrolyzed hyperbranched chloromethyl(vinyl)phenyl acetate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 108-24-7, Acetic anhydride 1826-67-1, Vinylmagnesium bromide 2316-64-5, 5-Bromo-2-hydroxybenzyl alcohol 15442-91-8, 1,2,4,5-Tetrakis(bromomethyl)benzene 866255-56-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 903905-08-8P 903905-25-9P 903905-26-0P 903905-27-1P 903905-29-3P 915104-85-7P 915104-90-4P 953419-78-8P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(proton acceptor; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 247150-86-3 812692-94-7 910918-03-5 ***910918-04-6*** 910918-06-8 910918-07-9 910918-09-1 910918-10-4 910918-12-6 ***910918-13-7*** 910918-15-9 910918-16-0 910918-18-2 910918-19-3
RL: CAT (Catalyst use); USES (Uses)
(radiation-sensitive acid generator; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

IT 524699-60-3P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(radiation-sensitive acid generator; pos.-working radiation resists

contg. branched polymers and sulfonium salt acid generators)

IT 157057-21-1DP, hydrolyzed, reaction product with cyclohexaneethanol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(star, 4-arm; pos.-working radiation resists contg. branched polymers and sulfonium salt acid generators)

L14 ANSWER 15 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:315822 CAPLUS <<LOGINID::20080627>>
DN 148:318679
ED Entered STN: 13 Mar 2008
TI Manufacture of polymers by chain-transfer reaction, their positively working resist compositions and pattern formation, and compounds for chain-transfer agents
IN Kaneko, Yushi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 58pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008056810	A	20080313	JP 2006-235617	20060831
PRAI JP 2006-235617		20060831		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008056810	IPCI	C08F0002-38 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C07D0307-32 [I,A]; C07D0307-00 [I,C*]; C07D0313-06 [I,A]; C07D0313-00 [I,C*]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/BJ10; 2H025/CB14; 2H025/CB41; 4C062/JJ15; 4J011/NA24; 4J011/NA26

GI

/ Structure 18 in file .gra /

AB The polymers are prepd. by polymn. of monomers while adding (a) monomers, (b) polymn. initiators, and (c) chain-transfer agents to a reaction system, where the chain-transfer agents comprise compds. represented by A1(C:B1)mSA2 (A1 = alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, aryl, heterocycle, alkoxy, acyloxy, cyano, amino, alkylthio, arylthio, heterocyclicthio; B1 = O, S; m = 0, 1; when A2 = H, m = 1). The pos. working resist compns. contain compds. which generate acids upon irradn. of actinic light or radiation and acid-decompg. polymers prepd. as above. Preferably, the acid-decompg. polymers further contain .gtoreq.1 kinds of repeating units selected from lactone group-contg. repeating units, OH-contg. repeating units, cyano-contg. repeating units, or acid

group-contg. repeating units. The pos. working resist compns. are formed into films, exposed to light, and developed to give .ltoreq.100-nm fine patterns with improved line edge roughness. Compds. I and II (C1-C3 = H, alkyl, halo, alkoxycarbonyl, cyano; C1-C3 may be bonded together and form ring) for the chain-transfer agents are also claimed.

ST chain transfer agent acrylic polymer prepn photoresist; DUV resist pos acrylic polymer prepn

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(Troysol S 366, surfactant; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fluorine-contg., surfactant; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT Chain transfer agents
Positive photoresists
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyoxyalkylene-, KP 341, surfactant; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polysiloxane-, KP 341, surfactant; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT Fluoropolymers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polysiloxane-, surfactant; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT 258879-87-7P 405509-21-9P 485819-05-4P 485819-09-8P 608140-58-5P 684269-25-8P 950596-71-1P 1009835-50-0P 1009835-54-4P 1009835-55-5P 1009835-56-6P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(assumed monomers; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT 78-67-1, V 60 2589-57-3, V 601 4419-11-8, V 65
RL: CAT (Catalyst use); USES (Uses)
(initiator; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT 2094-98-6, V 40, Initiator
RL: CAT (Catalyst use); USES (Uses)
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT 340964-38-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

IT 102-71-6, Triethanolamine, uses 120-07-0, N-Phenyldiethanolamine 24544-04-5, 2,6-Diisopropylaniline
RL: MOA (Modifier or additive use); USES (Uses)
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)
IT 288-13-1, 1H-Pyrazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)
IT 929045-74-9P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents of)
IT 5675-79-6 792124-02-8, 1H-Pyrazole-1-carbodithioic acid 1009835-57-7
RL: MOA (Modifier or additive use); USES (Uses)
(manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents of)
IT 66003-78-9 144317-44-2 209482-18-8 284474-28-8 309751-48-2 341979-02-0 479628-12-1 ***808752-25-2*** 852572-15-7 863024-59-3 879180-00-4 902096-34-8
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)
IT 96-48-0, .gamma.-Butyrolactone 97-64-3, Ethyl lactate 84540-57-8, Propylene glycol methyl ether acetate
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)
IT 137462-24-9, Megafac F 176
RL: MOA (Modifier or additive use); USES (Uses)
(surfactant; manuf. of polymers by chain-transfer reaction and their pos. DUV resist compns., pattern formation, and chain-transfer agents)

L14 ANSWER 16 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:281950 CAPLUS <<LOGINID::20080627>>
DN 148:318669
ED Entered STN: 06 Mar 2008
TI Resin composition for immersion photolithography and method for pattern formation using the same
IN Nishimura, Yukio; Ehata, Takuma; Saito, Akio
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 27pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008052102	A	20080306	JP 2006-229094	20060825
PRAI	JP 2006-229094		20060825		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES

JP 2008052102 IPCI G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; G03F0007-38 [N,A]
FTERM 2H025/AA00; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/FA01; 2H025/FA08; 2H025/FA12; 2H025/FA17; 2H096/AA25; 2H096/BA11; 2H096/DA10; 2H096/EA05; 2H096/EA11; 2H096/FA01; 2H096/GA08

GI

/ Structure 19 in file .gra /

AB The title resin compn. is for immersion photolithog. with 193 nm exposure light and contains an acid-sensitive alkali-solubilizable resin and a photoacid generator, wherein the photo-acid generator has general structure I(R1 = C1-8 fluoro alkyl, fluoro alkylene; R2 = H, C1-10 alkyl). Compn. generates low eluate in the immersion soln.

ST resin compn immersion photolithog photoacid generator

IT Acids, uses
RL: CAT (Catalyst use); USES (Uses)
(acid-precursor, photoacid generator; resin compn. for immersion photolithog. and method for pattern formation using the same)

IT Photoresists
(immersion photoresist; resin compn. for immersion photolithog. and method for pattern formation using the same)

IT Photolithography
(immersion; resin compn. for immersion photolithog. and method for pattern formation using the same)

IT ***862261-50-5*** 1009638-59-8 1009638-60-1
RL: CAT (Catalyst use); USES (Uses)
(photoacid-generator in resin compn. for immersion photolithog.)

L14 ANSWER 17 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:124303 CAPLUS <<LOGINID::20080627>>
DN 148:202132
ED Entered STN: 01 Feb 2008
TI Positive resist composition and method of forming resist pattern
IN Mimura, Takeyoshi; Kawaue, Akiya; Takasu, Ryoichi
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 65pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008012999	A1	20080131	WO 2007-JP61648	20070608

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,

RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

	JP 2008026725	A	20080207	JP 2006-201008	20060724
	JP 2008032839	A	20080214	JP 2006-203629	20060726
	JP 2008032840	A	20080214	JP 2006-203630	20060726
PRAI	JP 2006-201008	A	20060724		
	JP 2006-203629	A	20060726		
	JP 2006-203630	A	20060726		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2008012999	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
JP 2008026725	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; C08F0012-24 [I,A]; C08F0012-00 [I,C*]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0012-00 [I,C]; C08F0012-24 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB14; 2H025/CB16; 2H025/CB17; 2H025/CB41; 4J100/AB02R; 4J100/AB07P; 4J100/AL08Q; 4J100/BA02Q; 4J100/BA11Q; 4J100/BA15Q; 4J100/BB07P; 4J100/BB18P; 4J100/BC02Q; 4J100/BC03Q; 4J100/BC04Q; 4J100/BC07Q; 4J100/BC08Q; 4J100/BC09Q; 4J100/CA04; 4J100/CA05; 4J100/DA01; 4J100/DA04; 4J100/JA38
JP 2008032839	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0212-14 [I,A]; C08F0212-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0212-00 [I,C]; C08F0212-14 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB14; 2H025/CB17; 2H025/CB41; 4J100/AB07P; 4J100/AL08Q; 4J100/AL26Q; 4J100/BA02Q; 4J100/BA03P; 4J100/BA12Q; 4J100/BA15Q; 4J100/BB18Q; 4J100/BC02Q; 4J100/BC03Q; 4J100/BC04Q; 4J100/BC08Q; 4J100/BC09Q; 4J100/BC26Q; 4J100/CA03; 4J100/JA38
JP 2008032840	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; G03F0007-004 [I,A]; C08F0212-14 [I,A]; C08F0212-00 [I,C*]; C08F0220-28 [I,A]; C08F0220-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0212-00 [I,C]; C08F0212-14 [I,A]; C08F0220-00 [I,C]; C08F0220-28 [I,A]; G03F0007-004 [I,C]; G03F0007-004

[I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]

FTERM 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BF02; 2H025/BF15; 2H025/BG00; 2H025/CB14; 2H025/CB17; 2H025/CB41; 2H025/CC20; 2H025/FA17; 4J100/AB07P; 4J100/AL08Q; 4J100/BA02Q; 4J100/BA03P; 4J100/BA11Q; 4J100/BB07Q; 4J100/BC02Q; 4J100/BC08Q; 4J100/BC09Q; 4J100/BC12Q; 4J100/CA04; 4J100/JA38

GI

/ Structure 20 in file .gra /

AB The resist compn. contains 100 parts of a resin component (A) and 1-40 parts of an acid generator component (B), wherein the component (A) contains a structural unit derived from hydroxystyrene and a structural unit having an acetal-based acid-dissociative dissoln.-inhibiting group while the component (B) contains acid generator (B-1) having .gtoreq.1 anion moiety selected from I (X" = C2-6 alkylene having .gtoreq.1 H atom substituted by F atom) Y"SO2N-SO2Z", and U"SO2C-(SO2V")(SO2W") (Y", Z", U", V", W" = C1-10 alkyl having .gtoreq.1 H atom substituted by F atom), or acid generator (B-2) having an anion moiety RSO3- [R = (un)substituted hydrocarbyl] or acid generator (B-3) having a cation moiety R1S+R2R3 [R1-R3 = (un)substituted Ph or naphthyl, with the proviso that R1-R3 are not unsubstituted Ph at the same time]. The resist compn. can form high-resol. resist patterns with reduced surface roughness.

ST acid generator pos photoresist pattern formation; hydroxystyrene copolymer pos photoresist acid generator

IT Sulfonium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generators for pos. photoresist compns. for forming high-resol. patterns)

IT Positive photoresists
(chem. amplified; acid generators for pos. photoresist compns. for forming high-resol. patterns)

IT 1004514-55-9DP, hydrolyzed
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid generators for pos. photoresist compns. for forming high-resol. patterns)

IT 144317-44-2 241806-75-7 393110-05-9 460731-18-4 476481-15-9
808752-25-2 849178-90-1 851232-62-7
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generators for pos. photoresist compns. for forming high-resol. patterns)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Nippon Zeon Co Ltd; JP 07-181680 A 1995 CAPLUS
(2) Nippon Zeon Co Ltd; US 5688628 A1 1995 CAPLUS
(3) Tokyo Ohka Kogyo Co Ltd; JP 2006169319 A 2006 CAPLUS
(4) Tokyo Ohka Kogyo Co Ltd; WO 200627997 A1 2006
(5) Tokyo Ohka Kogyo Co Ltd; WO 200664626 A1 2006
(6) Tokyo Ohka Kogyo Co Ltd; JP 200678760 A 2006

L14 ANSWER 18 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:91953 CAPLUS <<LOGINID::20080627>>
DN 148:155419
ED Entered STN: 24 Jan 2008
TI Resist polymers and their manufacture, resist compositions with improved resolution and exposure latitude, positive or negative resist compositions, and pattern formation
IN Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008013733	A	20080124	JP 2006-189266	20060710
PRAI	JP 2006-189266		20060710		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008013733	IPCI	C08J0003-14 [I,A]; C08J0003-12 [I,C*]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	C08J0003-12 [I,C]; C08J0003-14 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/BJ10; 2H025/CB41; 2H025/CB42; 2H025/CC17; 2H025/CC20; 4F070/AA17; 4F070/AA32; 4F070/AB09; 4F070/AB22; 4F070/AC32; 4F070/AC43; 4F070/AE28; 4F070/DA23; 4F070/DA24; 4F070/DC11

AB Resist polymers are prepd. by adding poor solvents to resin solns. to ppt. the polymers in powder form, followed by recovering the powders. The pos. resist compns. contain (A1) acid-decompg. polymers prepd. as above, and (B) acid generators. The neg. resist compns. contain (A2) alkali-sol. polymers prepd. as above, (B) acid generators, and (C) acid crosslinking agents.
ST photoresist polymer prepn pptn poor solvent
IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(Troysol S 366, surfactant; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)
IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fluorine-contg., surfactant; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)
IT Fluoropolymers, uses
RL: MOA (Modifier or additive use); USES (Uses)

(polysiloxane-, surfactant; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT Negative photoresists
Positive photoresists
(prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 209482-18-8 284474-28-8 301664-71-1 309751-48-2 479628-12-1
808752-25-2 852572-15-7 863024-59-3
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 141-78-6, Ethyl acetate, uses 142-82-5, Heptane, uses
RL: NUU (Other use, unclassified); USES (Uses)
(poor solvent; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 1001632-21-8P 1001632-22-9P 1001632-23-0P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 102-71-6, Triethanolamine, uses 120-07-0, N-Phenyldiethanolamine
716-79-0, 2-Phenylbenzimidazole 19600-49-8, Triphenylsulfonium acetate
24544-04-5, 2,6-Diisopropylaniline
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 108-32-7, Propylene carbonate 108-94-1, Cyclohexanone, uses 1320-67-8, Propylene glycol methyl ether
RL: NUU (Other use, unclassified); USES (Uses)
(prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 84540-57-8, Propylene glycol methyl ether acetate
RL: NUU (Other use, unclassified); USES (Uses)
(resist solvent; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

IT 137462-24-9, Megafac F 176
RL: MOA (Modifier or additive use); USES (Uses)
(surfactant; prepn. of photoresist polymers by pptn. with poor solvents for pos. and neg. photoresist compns. with improved resoln. and exposure latitude)

L14 ANSWER 19 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:64161 CAPLUS <<LOGINID::20080627>>
DN 148:131934
ED Entered STN: 17 Jan 2008
TI Polystyrenes containing sulfonium salts and their photoacid generator-free positive photoresist compositions
IN Watanabe, Takeo; Kinoshita, Hiroo; Yusa, Shinichi; Yamanaka, Tomotaka; Hayakawa, Masamichi; Osawa, Yosuke; Ogi, Satoshi; Komuro, Yoshitaka

PA Hyogo Prefecture, Japan; Toyo Gosei Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 29pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008007743	A	20080117	JP 2006-355612	20061228
PRAI JP 2006-150163	A	20060530		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008007743	IPCI	C08F0008-34 [I,A]; C08F0008-00 [I,C*]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0212-14 [I,A]; C08F0212-00 [I,C*]; G03F0007-004 [I,A]
	IPCR	C08F0008-00 [I,C]; C08F0008-34 [I,A]; C08F0212-00 [I,C]; C08F0212-14 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AB16; 2H025/AC05; 2H025/AC06; 2H025/AD03; 2H025/BE07; 2H025/BF15; 2H025/BG00; 2H025/FA17; 4J100/AB07P; 4J100/AB07R; 4J100/AB07S; 4J100/BA02H; 4J100/BA02Q; 4J100/BA02R; 4J100/BA03P; 4J100/BA22H; 4J100/BA22S; 4J100/BA53H; 4J100/BA53Q; 4J100/BC43H; 4J100/BC43Q; 4J100/CA03; 4J100/CA06; 4J100/CA31; 4J100/DA01; 4J100/FA19; 4J100/GC35; 4J100/HA61; 4J100/HC69; 4J100/JA38

AB Title polystyrenes comprise polystyrene units at the benzene rings substituted with OCH(Me)OR1O-2-R2-6-R3-3-R4-5-R5-4-S(R6)(R7)+-Q1X- (R1 = linear or branched C2-9 hydrocarbylene; R2 - R5 = H, linear or branched C1-3 hydrocarbyl; R6 - R7 = org. group, R6 and R7 may form divalent org. group together; Q1 = benzene ring; X- = anion), polystyrene units at the benzene rings substituted with OCH(Me)OR8 (R8 = linear or branched C2-9 hydrocarbyl) and/or polystyrene units at the benzene rings substituted with O2COBu-tert, and poly(hydroxystyrene) units, and optionally polystyrene units. The compns. contain org. solvents and the modified polystyrenes. The anions preferably are perfluoroalkylsulfonate ions, bis(perfluoroalkylsulfone)imide ions, or cyclo-1,3-perfluoropropanedisulfone imide ion. The photoresists show high sensitivity to extreme-UV (EUV).

ST pos photoresist polystyrene extreme UV sensitivity; photoacid generator free pos photoresist polystyrene; vinyloxyethoxyphenyldiphenylsulfonium perfluorobutanesulfonate polyhydroxystyrene vinyl ether photoresist

IT Positive photoresists
(sulfonium salt-contg. polystyrene photoacid generator-free pos. photoresists with high sensitivity to extreme-UV)

IT 950193-38-1P ***950193-39-2P*** 1000864-50-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(sulfonium salt-contg. polystyrene photoacid generator-free pos. photoresists with high sensitivity to extreme-UV)

IT 109-92-2DP, Ethyl vinyl ether, reaction products with poly(hydroxystyrene), polymers 24424-99-5DP, Di-tert-butyl dicarbonate,

reaction products with modified polystyrenes 24979-70-2DP, Poly(p-hydroxystyrene), reaction products with Et vinyl ether, polymers 528593-34-2DP, polymers 950193-20-1DP, polymers 950193-29-0DP, polymers ***950193-34-7DP*** , polymers 950193-36-9DP, polymers 1000864-48-1DP, polymers
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sulfonium salt-contg. polystyrene photoacid generator-free pos. photoresists with high sensitivity to extreme-UV)

IT 108-05-4, Vinyl acetate, reactions 108-95-2, Phenol, reactions 110-75-8 945-51-7, Diphenyl sulfoxide 23144-52-7, 8-Chloro-1-octanol 90076-67-8 391232-41-0 528593-34-2 588668-97-7 950193-41-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(sulfonium salt-contg. polystyrene photoacid generator-free pos. photoresists with high sensitivity to extreme-UV)

L14 ANSWER 20 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1469347 CAPLUS <<LOGINID::20080627>>
DN 148:109067
ED Entered STN: 27 Dec 2007
TI Positive resist composition and method for formation of resist pattern
IN Takeshita, Masaru; Watanabe, Ryoji; Iwai, Takeshi
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 84pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007148525	A1	20071227	WO 2007-JP61284	20070604
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	JP 2008026838	A	20080207	JP 2006-211890	20060803
PRAI	JP 2006-173920	A	20060623		
	JP 2006-211890	A	20060803		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2007148525	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
JP 2008026838	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027

[I,A]; H01L0021-02 [I,C*]
IPCR G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
ECLA G03F007/004D; G03F007/039C1S
FTERM 2H025/AA00; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17

GI

/ Structure 21 in file .gra /

AB The resist compn. comprises a resin component and an acid-generator component, wherein the acid-generator component comprises an acid-generator having a cationic moiety R1R2S+R3 [R1, R2 = (un)substituted naphthyl; R3 = alkyl, aryl] and an anionic moiety I (X = C2-6 alkylene having .gtoreq.1 H atom substituted by F atom) or (YSO2)N-(SO2Z) (Y, Z = C1-10 alkyl having .gtoreq.1 H atom substituted by F atom). The resist compn. forms patterns with good DOF (depth of focus) characteristics.
ST sulfonium compd acid generator pos photoresist pattern formation
IT Photolithography
Positive photoresists
(acid generators for pos. resist compns. for forming patterns with good depth-of-focus characteristics)
IT 741701-00-8 741701-01-9 756877-86-8 882491-33-0 934672-73-8 959392-49-5 959609-70-2 960520-65-4 ***1000000-45-2*** 1000000-46-3
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generators for pos. resist compns. for forming patterns with good depth-of-focus characteristics)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Rohm And Hass Electronic Materials L L C; WO 2002019033 A2 2004 CAPLUS
(2) Rohm And Hass Electronic Materials L L C; JP 2004521372 A 2004
(3) Rohm And Hass Electronic Materials L L C; US 6664022 B1 2004 CAPLUS
(4) Tokyo Ohka Kogyo Co Ltd; JP 2005037888 A 2005 CAPLUS
(5) Tokyo Ohka Kogyo Co Ltd; WO 2005040922 A1 2005 CAPLUS
(6) Tokyo Ohka Kogyo Co Ltd; WO 2005057284 A1 2005 CAPLUS
(7) Tokyo Ohka Kogyo Co Ltd; WO 2005057287 A1 2005 CAPLUS
(8) Tokyo Ohka Kogyo Co Ltd; JP 2005172949 A 2005 CAPLUS
(9) Tokyo Ohka Kogyo Co Ltd; JP 2005173468 A 2005 CAPLUS
(10) Tokyo Ohka Kogyo Co Ltd; JP 2005196095 A 2005 CAPLUS
(11) Tokyo Ohka Kogyo Co Ltd; WO 2006027997 A1 2006 CAPLUS
(12) Tokyo Ohka Kogyo Co Ltd; JP 2006078760 A 2006 CAPLUS

L14 ANSWER 21 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1442784 CAPLUS <<LOGINID::20080627>>
DN 148:66149
ED Entered STN: 20 Dec 2007
TI Radiation-sensitive resin compositions minimizing elution in immersion lithography
IN Nakajima, Hiromitsu; Saito, Akio; Harada, Kentaro; Nishimura, Yukio; Nakagawa, Hiroki
PA Jsr Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 32pp.

CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007327983	A	20071220	JP 2006-156792	20060606
PRAI JP 2006-156792		20060606		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007327983	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA00; 2H025/AA01; 2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CC20; 2H025/FA03; 2H025/FA17

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The compns., for immersion lithog. using 193-nm light sources, contain resins and radiation-sensitive acid generators represented by (i) I and/or II or (ii) III and/or IV [R1 = H, F, OH, C1-10 alkyl(oxy), C2-11 alkoxycarbonyl; R2 = C1-10 alkyl(oxy), C1-10 alkanesulfonyl; R3 = C1-10 alkyl, Ph, naphthyl; X = 2-10 bivalent group; R4, R5 = C1-8 fluoroalkyl, C2-8 fluoroalkylene; n = 0-2 integer; m = 0-10 integer]. The compns. form high-resoln. square patterns with min. elution in immersion liqs.
ST radiation sensitive resist acid generator elution resistant; argon fluoride excimer laser photoresist acid generator
IT Positive photoresists
(chem. amplified photoresist compns. minimizing elution in immersion lithog. to form square patterns)
IT 831235-18-8P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified photoresist compns. minimizing elution in immersion lithog. to form square patterns)
IT 460731-18-4 541547-03-9 643030-14-2 643030-18-6 ***862261-67-4***
RL: CAT (Catalyst use); USES (Uses)
(radiation sensitive acid generators; chem. amplified photoresist compns. minimizing elution in immersion lithog. to form square patterns)

L14 ANSWER 22 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1420780 CAPLUS <<LOGINID::20080627>>
DN 148:42390
ED Entered STN: 13 Dec 2007
TI Positive radiation-sensitive resist pattern formation by liquid immersion

lithography and their radiation-sensitive resin compositions
IN Nishimura, Yukio
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007322838	A	20071213	JP 2006-154043	20060601
PRAI JP 2006-154043		20060601		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007322838	IPCI	G03F0007-38 [I,A]; G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-38 [I,C]; G03F0007-38 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CC03; 2H025/CC20; 2H025/FA01; 2H025/FA29; 2H096/AA25; 2H096/BA09; 2H096/BA11; 2H096/DA01; 2H096/EA03; 2H096/EA05; 2H096/EA18

AB The process involves steps of (i) applying radiation-sensitive resin compns. on substrates to form photoresist films, (ii) pre-application bake for the photoresist films, (iii) liq. immersion exposure of the photoresist film to a radiation with a liq. immersion exposure liq. having refractive index at 193 nm higher than that of the air being provided between a lens and the photoresist films, (iv) post exposure bake for the photoresist films, and (v) stripping the exposed site of the photoresist films with developers, wherein the radiation-sensitive resin compns. contain resins, radiation-sensitive acid generators, N-contg. compds., and solvents and the pre-application bake is run at a temp. higher than the Tg of the resins. Preferably, the resins contain repeating units having structures which become sol. in alkalis upon acids and repeating units contg. lactone structures.

ST deep UV resist pos liq immersion lithog; pos radiation sensitive resist liq immersion lithog; lactone acrylate copolymer deep UV resist pos; cyclopentyl acrylate copolymer deep UV resist pos; adamantane acrylate copolymer deep UV resist pos; pyrrolidine acid diffusion controller deep UV resist

IT 86953-79-9, N-tert-Butoxycarbonylpyrrolidine
RL: MOA (Modifier or additive use); USES (Uses)
(acid diffusion controller; pos. deep UV resist pattern formation by liq. immersion lithog. and their radiation-sensitive resin compns.)

IT 144317-44-2, Triphenylsulfonium nonafluorobutane sulfonate
910606-27-8
RL: CAT (Catalyst use); USES (Uses)
(acid generator; pos. deep UV resist pattern formation by liq. immersion lithog. and their radiation-sensitive resin compns.)

IT 75-59-2, Tetramethylammonium hydroxide

RL: NUU (Other use, unclassified); USES (Uses)
(developer; pos. deep UV resist pattern formation by liq. immersion lithog. and their radiation-sensitive resin compns.)

IT 959697-16-6P 959697-17-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. deep UV resist pattern formation by liq. immersion lithog. and their radiation-sensitive resin compns.)

IT 96-48-0, .gamma.-Butyrolactone 108-94-1, Cyclohexanone, uses
84540-57-8, Propylene glycol monomethyl ether acetate
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; pos. deep UV resist pattern formation by liq. immersion lithog. and their radiation-sensitive resin compns.)

L14 ANSWER 23 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1420660 CAPLUS <<LOGINID::20080627>>
DN 148:66139
ED Entered STN: 13 Dec 2007
TI Positive photoresist compositions, method for forming patterns therewith, and resins and monomers therefor
IN Saegusa, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 50pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007322660	A	20071213	JP 2006-151869	20060531
PRAI	JP 2006-151869		20060531		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007322660	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AA10; 2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17

GI

/ Structure 22 in file .gra /

AB The compns. contain (A) resins I (Rx = H, alkyl, CN; Ra1, Ra2 = H, org. group; Ra3, Ra4 = org. group; X = single bond, alkylene; Y = at. group forming monocyclic hydrocarbon with C1; n = 1, 2) which can be decompd. by acids to increase soly. in alk. developers and (B) compds. generating

acids by actinic rays or radiation. The compns. form fine (e.g., .ltoreq.100 nm) patterns with improved line-edge roughness. Also claimed are the resins I and their monomers II (Rx, Ra1-Ra4, X, Y, n = same as above).

ST pos photoresist adamantylisopropyl butyrolactone hydroxypropylcyclohexanol methacrylate copolymer; chem amplified pos photoresist line edge roughness

IT Positive photoresists
(chem. amplified; pos. photoresist compns. forming fine patterns with improved line-edge roughness)

IT 89450-28-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(in prepn. of monomers; pos. photoresist compns. forming fine patterns with improved line-edge roughness)

IT 75-16-1, Methylmagnesium bromide 94-60-0, Dimethyl 1,4-cyclohexanedicarboxylate 920-46-7 925-90-6, Ethylmagnesium bromide 17449-76-2, Methyl 4-hydroxycyclohexanecarboxylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of monomers; pos. photoresist compns. forming fine patterns with improved line-edge roughness)

IT 86564-41-2P 959786-31-3P 959786-33-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(monomers; pos. photoresist compns. forming fine patterns with improved line-edge roughness)

IT 144317-44-2 209482-18-8 241806-75-7 284474-28-8 425670-64-0 474516-38-6 680200-03-7 ***808752-25-2*** 852572-15-7 863024-59-3 879180-00-4
RL: CAT (Catalyst use); USES (Uses)
(photoacid generators; pos. photoresist compns. forming fine patterns with improved line-edge roughness)

IT 959786-54-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresist compns. forming fine patterns with improved line-edge roughness)

IT 959786-36-8 959786-39-1 959786-42-6 959786-46-0 959786-49-3 959786-52-8 959786-56-2 959786-59-5 959786-62-0 959786-64-2 959786-67-5 959786-70-0 959786-72-2 959786-75-5 959793-29-4 959793-31-8 959793-32-9 959793-33-0
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compns. forming fine patterns with improved line-edge roughness)

L14 ANSWER 24 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1416131 CAPLUS <<LOGINID::20080627>>
DN 148:34486
ED Entered STN: 13 Dec 2007
TI Electrically conductive agents and their electrically conductive resin compositions with bleed-out prevention for coatings or films
IN Naito, Kiyotaka; Kikuchi, Masayuki; Nagashio, Hiroaki; Kamei, Teruaki
PA Japan Carlit Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 17pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007321115	A	20071213	JP 2006-155592	20060605
PRAI	JP 2006-155592		20060605		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007321115	IPCI	C08L0101-00 [I,A]; C08K0005-3432 [I,A]; C08K0005-00 [I,C*]; H01B0001-20 [I,A]; C09D0005-24 [I,A]; C09D0121-00 [I,A]; C09D0171-00 [I,A]; C08L0071-02 [I,A]; C08L0071-00 [I,C*]
	IPCR	C08L0101-00 [I,C]; C08L0101-00 [I,A]; C08K0005-00 [I,C]; C08K0005-3432 [I,A]; C08L0071-00 [I,C]; C08L0071-02 [I,A]; C09D0005-24 [I,C]; C09D0005-24 [I,A]; C09D0121-00 [I,C]; C09D0121-00 [I,A]; C09D0171-00 [I,C]; C09D0171-00 [I,A]; H01B0001-20 [I,C]; H01B0001-20 [I,A]
	FTERM	4J002/AC071; 4J002/AC081; 4J002/BB031; 4J002/BB121; 4J002/BC031; 4J002/BD041; 4J002/BD101; 4J002/BG031; 4J002/BG041; 4J002/BN151; 4J002/CB001; 4J002/CD001; 4J002/CF061; 4J002/CF071; 4J002/CG001; 4J002/CG041; 4J002/CH022; 4J002/CH041; 4J002/CH071; 4J002/CH091; 4J002/CK021; 4J002/CM041; 4J002/CN021; 4J002/CN031; 4J002/CP031; 4J002/EU046; 4J002/EV237; 4J002/EV267; 4J002/FD116; 4J002/FD117; 4J002/GH00; 4J002/GT00; 4J038/DF012; 4J038/DN011; 4J038/JB29; 4J038/NA20; 4J038/PA17; 4J038/PA19; 4J038/PC08; 5G301/DA28; 5G301/DA42

AB Title agents are polyether-polyol solns. contg. pyridinium salts-based ionic liq. and org. fluoro anionic salts. A mixt. of 10 parts agent [comprising of N-butyl-3-methylpyridinium bis(trifluoromethanesulfonyl)imide 10, Sumiaid 300G 80, and LiCF3SO3 10%] and 90 parts Pandex T 8190N was pressed into a sheet with resistivity 7 .times. 10$ .OMEGA./cm2 at 25.degree. and 40% relative humidity (RH) and no bleed out after 72 h at 60.degree. and 90% RH. In the onium salt of the pyridine deriv., and the anion of fluorine-contg. org. anion salts, it is preferable that they are perfluoro alkane sulfonic acid, bis (perfluoro alkane sulfonyl) imidic acid, cyclic perfluoro alkylene disulfone imidic acid, perfluoro alkane disulfonic acid, and tris (perfluoro alkane sulfonyl) methide acids.

ST pyridinum salt fluoro anionic compd polyoxyalkylene elec conductive agent; bleed out prevention coating elec conductive agent; resin sheet elec conductive agent bleed out prevention

IT Urethane rubber, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(Nippollan 5119, foam sheets; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Electric conductors
(agents; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Epichlorohydrin rubber
Synthetic rubber, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material

use); USES (Uses)
(allyl glycidyl ether-epichlorohydrin-ethylene oxide, Epichlomer CG 102, foam sheets; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Coating materials
(elec. conductive; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fluoro, anionic; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Pyridinium compounds
RL: MOA (Modifier or additive use); USES (Uses)
(pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Polyoxyalkylenes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT Polyurethanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(sheets; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT 209003-33-8P, Coronate L-ethylene oxide-propylene oxide copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cured, coatings; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT 33454-82-9, Lithium trifluoromethanesulfonate 90076-65-6, Lithium bis(trifluoromethanesulfonyl)imide 132404-42-3, Lithium tris(trifluoromethanesulfonyl)methide 156000-47-4 189217-62-7 344790-86-9 712355-02-7 916730-37-5 929602-03-9 ***959694-80-5*** 959694-81-6
RL: MOA (Modifier or additive use); USES (Uses)
(pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT 121786-16-1, Sumiaid 300G
RL: NUU (Other use, unclassified); USES (Uses)
(pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT 26587-37-1, Allyl glycidyl ether-epichlorohydrin-ethylene oxide copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(rubber, foam sheets; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin sheets with no bleed out)

IT 27136-15-8, Acrypet IRH 70 216305-38-3, Pandex T 8190N
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(sheets; pyridinum salt- and org fluoro anionic salt-contg. polyoxyalkylenes as elec. conductive agents for coatings or resin

sheets with no bleed out)

L14 ANSWER 25 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1390070 CAPLUS <<LOGINID::20080627>>
DN 148:42374
ED Entered STN: 06 Dec 2007
TI Photoresists containing polymers with sulfonium salt-containing repeating units and their patterning
IN Hatakeyama, Jun; Osawa, Yoichi; Tachibana, Seiichiro
PA Shin-Etsu Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 77pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007316600	A	20071206	JP 2007-64395	20070314
PRAI JP 2006-120113	A	20060425		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007316600	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-10 [I,A]; C08F0220-00 [I,C*]; C08F0212-14 [I,A]; C08F0212-00 [I,C*]; C08F0216-12 [I,A]; C08F0216-00 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; C08F0212-00 [I,C]; C08F0212-14 [I,A]; C08F0216-00 [I,C]; C08F0216-12 [I,A]; C08F0220-00 [I,C]; C08F0220-10 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BF02; 2H025/BF15; 2H025/BG00; 2H025/CC20; 2H025/DA34; 2H025/FA17; 4J100/AB07P; 4J100/AB07R; 4J100/AJ02R; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AM21P; 4J100/BA02P; 4J100/BA02Q; 4J100/BA03P; 4J100/BA03Q; 4J100/BA03R; 4J100/BA05Q; 4J100/BA08Q; 4J100/BA10Q; 4J100/BA10R; 4J100/BA11Q; 4J100/BA11R; 4J100/BA12P; 4J100/BA15P; 4J100/BA15Q; 4J100/BA16R; 4J100/BA50P; 4J100/BA72Q; 4J100/BB07R; 4J100/BB18R; 4J100/BC02P; 4J100/BC03P; 4J100/BC03Q; 4J100/BC03R; 4J100/BC04P; 4J100/BC04Q; 4J100/BC04R; 4J100/BC08P; 4J100/BC08Q; 4J100/BC08R; 4J100/BC09Q; 4J100/BC09R; 4J100/BC12Q; 4J100/BC12R; 4J100/BC22Q; 4J100/BC23Q; 4J100/BC27Q; 4J100/BC43P; 4J100/BC43Q; 4J100/BC43R; 4J100/BC45Q; 4J100/BC48P; 4J100/BC48R; 4J100/BC49P; 4J100/BC49R; 4J100/BC53Q; 4J100/BC53R; 4J100/BC58Q; 4J100/BC58R; 4J100/BC83P; 4J100/BC84P; 4J100/CA05; 4J100/JA38

AB The photoresists, showing high sensitivity and forming patterns with min. line edge roughness, contain polymers having repeating unit [CR1(R2S+R3R4X-)CH2] [R1 = H, Me; R2 = phenylene, OR6, C:OYR6 [Y = O, NH; R6 = C1-6 alk(en)ylene, phenylene]; R3, R4 = C1-12 alkyl, C6-12 aryl, C7-20 aralkyl, thiophenyl; X- = C1-20 F-contg. imidate or methide acid

anion]. The polymers may be prepd. from sulfonium salts CH2:CR1R2S+R3R4X- (R1-R4, X- = the same as above), (meth)acrylates having lactone or hydroxy groups, and acid-labile group-substituted (meth)acrylate esters. The photoresists are applied on substrates, baked, exposed to .ltoreq.300-nm energy beams through photomasks, and developed to form patterns with high resoln.

ST photoresist sulfonium polymer photoacid generator sensitivity improved; methacryloyloxyphenyldiphenylsulfonium bisperfluoroethylsulfonylimide polymer photoresist chem amplified; line edge roughness sensitivity photoresist sulfonylmethide polymer

IT Positive photoresists
(chem. amplified; chem. amplified photoresists contg. polymers with sulfonium salt-contg. repeating units and their patterning)

IT 959152-68-2P 959152-69-3P 959155-00-1P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(chem. amplified photoresists contg. polymers with sulfonium salt-contg. repeating units and their patterning)

IT 959152-67-1P 959152-70-6P 959152-71-7P ***959152-72-8P***
959152-74-0P 959152-75-1P 959152-77-3P 959155-01-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified photoresists contg. polymers with sulfonium salt-contg. repeating units and their patterning)

IT 920-46-7, Methacryloyl chloride 60805-12-1 84246-29-7 161453-44-7 221203-22-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(chem. amplified photoresists contg. polymers with sulfonium salt-contg. repeating units and their patterning)

IT 959152-64-8P 959152-65-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(intermediates; chem. amplified photoresists contg. polymers with sulfonium salt-contg. repeating units and their patterning)

IT 959152-61-5P 959152-62-6P ***959152-63-7P***
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomers; chem. amplified photoresists contg. polymers with sulfonium salt-contg. repeating units and their patterning)

L14 ANSWER 26 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1177670 CAPLUS <<LOGINID::20080627>>
DN 147:469889
ED Entered STN: 18 Oct 2007
TI Fluorine-containing polymer, purification method, and radiation-sensitive resin composition
IN Nakagawa, Hiroki; Nakashima, Hiromitsu; Wakamatsu, Gouji; Harada, Kentarou; Nishimura, Yukio; Shioya, Takeo
PA JSR Corporation, Japan
SO PCT Int. Appl., 86pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 74
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007116664	A1	20071018	WO 2007-JP56094	20070323
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	JP 2006-99889	A	20060331		
	JP 2006-165310	A	20060614		
	JP 2007-247299	A	20060912		
	JP 2007-10765	A	20070119		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2007116664	IPCI	C08F0020-22 [I,A]; C08F0020-00 [I,C*]; G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	C08F0020-00 [I,C]; C08F0020-22 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]

AB Disclosed are a novel fluorine-contg. polymer, and a radiation-sensitive resin compn. for immersion exposure contg. such a polymer. The radiation-sensitive resin compn. enables to obtain a pattern having a good shape and excellent depth of focus, while hardly dissolving into water which comes into contact during immersion exposure. In addn., the radiation-sensitive resin compn. enables to obtain a large receding contact angle between a resist film and water. Also disclosed is a method for purifying a fluorine-contg. polymer. Specifically, the resin compn. contains a novel fluorine-contg. polymer (A) contg. repeating units represented by -CR1(AR2)CH2- (R1 = H, Me, CF3; A = linking group; R2 = F-contg. C1-6 alkyl, C4-20 alicyclic hydrocarbyl or its deriv.) and -CR3(COOCR4R4)CH2- (R3 = H, Me, CF3; R4 = C4-20 alicyclic hydrocarbyl or its deriv., C1-4 alkyl group) having an Mw of 1,000-50,000, a resin (B) having an acid labile group, a radiation-sensitive acid generator (C), a nitrogen-contg. compd. (D) and a solvent (E).

ST photoresist fluorine contg acrylic polymer purifn; radiation sensitive fluorine contg acrylic polymer purifn; acid generator radiation sensitive fluorine contg acrylic polymer

IT Photoresists
(method for purifn. of fluorine-contg. polymers and radiation-sensitive resin compns. contg. them)

IT Fluoropolymers, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)
(method for purifn. of fluorine-contg. polymers and radiation-sensitive resin compns. contg. them)

IT 144317-44-2, Triphenylsulfonium nonafluorobutanesulfonate 209482-18-8 425670-64-0 474516-38-6 479628-12-1 757235-57-7 ***808752-25-2***

RL: CAT (Catalyst use); USES (Uses)
(acid generator; method for purifn. of fluorine-contg. polymers and radiation-sensitive resin compns. contg. them)

IT 109384-19-2, N-tert-Butoxycarbonyl-4-hydroxypiperidine
RL: CAT (Catalyst use); USES (Uses)
(method for purifn. of fluorine-contg. polymers and radiation-sensitive resin compns. contg. them)

IT 340964-24-1P 831235-18-8P 840494-18-0P 852628-89-8P 952584-65-5P
952615-92-8P 952615-93-9P 952615-94-0P 952615-95-1P 952615-96-2P
952615-97-3P 952615-99-5P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)
(method for purifn. of fluorine-contg. polymers and radiation-sensitive resin compns. contg. them)

IT 952616-00-1P 952616-01-2P 952616-02-3P 952616-03-4P 952616-04-5P
952616-05-6P 952616-06-7P 952616-07-8P 952616-08-9P 952616-09-0P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(method for purifn. of fluorine-contg. polymers and radiation-sensitive resin compns. contg. them)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Fuji Photo Film Co Ltd; US 20050019690 A1 2005 CAPLUS
(3) Fuji Photo Film Co Ltd; JP 2005234178 A 2005 CAPLUS
(4) Fuji Photo Film Co Ltd; JP 200555890 A 2005
(5) Fuji Photo Film Co Ltd; EP 1580598 A2 2006 CAPLUS
(6) Fuji Photo Film Co Ltd; EP 1621927 A2 2006 CAPLUS
(7) Fuji Photo Film Co Ltd; US 20050208419 A1 2006 CAPLUS
(8) Fuji Photo Film Co Ltd; US 20060008736 A1 2006 CAPLUS
(9) Fuji Photo Film Co Ltd; JP 2006243264 A 2006 CAPLUS
(10) Fuji Photo Film Co Ltd; JP 200648029 A 2006
(11) Fuji Photo Film Co Ltd; JP 200679048 A 2006
(12) Fuji Photo Film Co Ltd; EP 1754999 A2 2007 CAPLUS
(13) Fuji Photo Film Co Ltd; JP 200765024 A 2007
(14) Jsr Corp; JP 2006335916 A 2006 CAPLUS
(15) Promerus Llc; WO 2006091523 A2 2006 CAPLUS
(16) Promerus Llc; WO 2006091802 A2 2006 CAPLUS
(17) Promerus Llc; JP 2006291177 A 2006 CAPLUS
(18) Rohm And Haas Electronic Materials L L C; EP 1720072 A1 2006 CAPLUS
(19) Rohm And Haas Electronic Materials L L C; US 20060246373 A1 2006 CAPLUS
(20) Rohm And Haas Electronic Materials L L C; JP 2006309245 A 2006 CAPLUS
(21) Tokyo Ohka Kogyo Co Ltd; WO 2005085954 A1 2005 CAPLUS
(22) Tokyo Ohka Kogyo Co Ltd; JP 2005284238 A 2005 CAPLUS
(23) Toshiba Corp; US 20060263726 A1 2006
(24) Toshiba Corp; JP 2006317774 A 2006 CAPLUS

L14 ANSWER 27 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1149360 CAPLUS <<LOGINID::20080627>>
DN 147:458853
ED Entered STN: 12 Oct 2007
TI Radiation-sensitive positive resist compositions forming patterns with minimized line edge roughness and etching resistance
IN Shimizu, Daisuke; Matsumura, Shinji
PA Jsr Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54pp.

CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007264051	A	20071011	JP 2006-85513	20060327
PRAI JP 2006-85513		20060327		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007264051	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0212-14 [I,A]; C08F0212-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0212-00 [I,C]; C08F0212-14 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AA09; 2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB16; 2H025/CB17; 2H025/CB41; 2H025/FA17; 2H025/FA41; 4J100/AB02R; 4J100/AB07P; 4J100/AB07Q; 4J100/AL03Q; 4J100/AL62R; 4J100/BA03H; 4J100/BA04Q; 4J100/BA20P; 4J100/HA08; 4J100/HA61; 4J100/JA38

OS MARPAT 147:458853
GI

/ Structure 23 in file .gra /

AB The title compns. contain (A) onium salts I and/or II (M+ = monovalent onium cation; Y = F-substituted C2-6 alkylene, C1-4 alkyl, C3-6 cycloalkyl) and (B) resins having acid-dissociable groups and becoming alkali sol. upon acid action, where the resins have (i) unit CH2CR1C6R2p(OH)qH5-p-q and (ii) unit chosen from CH2CR3C6R4r(OR5)sH5-r-s, CH2CR6C6R7tH5-t, III, CH2CR11C6H4OCHR12(OCH2R13), and/or CH2CR14(CO2R15) (R1, R3, R6, R8, R10, R11, R14 = H, Me; R2, R4, R7 = monovalent org. group; R5 = 1-branched alkyl, triorganosilyl, triorganogermyl; R9 = bivalent acid-dissociable org. group; R12 = C1-4 alkyl; R13 = H, Me, Et; R15 = tertiary alkyl; r, p, t = 0-3; s, q = 1-3).

ST radiation sensitive pos resist line edge roughness minimized; etching resistant EUV electron beam resist acid labile polymer; onium cycloperfluoropropanedisulfoneimidate acid generator acid labile resist polymer

IT Onium compounds
Sulfonium compounds
RL: MOA (Modifier or additive use); USES (Uses)
(acid generators; radiation-sensitive pos. resists forming patterns with minimized LER and excellent etching resistance)

IT Positive photoresists
(chem. amplified; radiation-sensitive pos. resists forming patterns with minimized LER and excellent etching resistance)

IT Onium compounds

RL: MOA (Modifier or additive use); USES (Uses)
(iodonium, acid generators; radiation-sensitive pos. resists forming patterns with minimized LER and excellent etching resistance)

IT ***808752-25-2*** ***862261-69-6*** 952109-05-6
952109-35-2
RL: MOA (Modifier or additive use); USES (Uses)
(radiation-sensitive acid generators; radiation-sensitive pos. resists forming patterns with minimized LER and excellent etching resistance)

IT 406198-64-9DP, p-Acetoxystyrene-p-tert-butoxystyrene-styrene copolymer, hydrolyzed 454470-64-5DP, hydrolyzed 882567-98-8DP, hydrolyzed
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(radiation-sensitive pos. resists forming patterns with minimized LER and excellent etching resistance)

L14 ANSWER 28 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1115232 CAPLUS <<LOGINID::20080627>>
DN 147:436848
ED Entered STN: 04 Oct 2007
TI Positive photoresists and their patterning with minimum line-edge roughness and without collapse
IN Yoshida, Yuko; Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007256640	A	20071004	JP 2006-81054	20060323
PRAI JP 2006-81054		20060323		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007256640	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17

GI

/ Structure 24 in file .gra /

AB The photoresists contain (A) resins having repeating unit I (A = 5-7-membered ring; L = single bond, bivalent bridging group; R1 = H, monovalent org. group) and increasing alkali soly. upon acid action and

(B) radiation-sensitive acid-generating compds. Also claimed are monomers II (R1 = H, monovalent org. group; R2, R3 = H, alkyl) and polymers therefrom.

ST pos photoresist patterning collapse prevention LER minimized; ribonolactone methacrylate polymer photoresist semiconductor photofabrication precision

IT Positive photoresists
(pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

IT 951222-39-2P 951222-40-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(monomers; pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

IT 144317-44-2 284474-28-8 425670-64-0 541547-03-9 ***808752-25-2*** 852572-09-9
RL: MOA (Modifier or additive use); USES (Uses)
(photoacid generators; pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

IT 951222-41-6P, 1-Dihydroxyadamantane methacrylate-isoadamantyl methacrylate-methacrylic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

IT 760-93-0, Methacrylic anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

IT 67-64-1DP, Acetone, reaction products with ribonolactone 108-94-1DP, Cyclohexanone, reaction products with ribonolactone 5336-08-3DP, D-(+)-Ribonolactone, acetalized
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

IT 951222-42-7 951222-44-9 951222-46-1 951222-48-3 951222-50-7 951222-52-9 951222-54-1 951222-56-3 951222-58-5 951222-59-6 951222-61-0 951223-32-8 951223-34-0
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresists contg. ribonolactone (meth)acrylate resins and forming collapse-resistant patterns with min. line edge roughness)

L14 ANSWER 29 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1115051 CAPLUS <<LOGINID::20080627>>
DN 147:436845
ED Entered STN: 04 Oct 2007
TI Positive resist composition and patterning method
IN Morita, Kensuke; Makino, Masaomi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007256347	A	20071004	JP 2006-77244	20060320
PRAI	JP 2006-77244		20060320		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007256347	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-30 [I,A]; C08F0220-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-30 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CB14; 2H025/CB16; 2H025/CB17; 2H025/CB41; 2H025/CB45; 2H025/FA17; 4J100/AB02R; 4J100/AB07Q; 4J100/AB07R; 4J100/AL08P; 4J100/BA02P; 4J100/BA03Q; 4J100/BA04P; 4J100/BA05R; 4J100/BA15P; 4J100/BA15R; 4J100/BC04P; 4J100/BC04R; 4J100/BC09P; 4J100/BC43P; 4J100/CA04; 4J100/CA05; 4J100/JA38

AB Title resist compn. comprises a resin component and actinic ray-sensitive or radiation-sensitive acid generator. The resin component contains benzyl group substituted by groups which dissoc. in the presence of an acid, is insol. or poorly sol. in alkali developing liq., and has increased soly. in the alkali developing liq. in the presence of an acid. A pattern-forming method involving using the resist compn. is also claimed.

ST pos resist pattern formation

IT Resists
(pos.-working; pos. resist compn. and patterning method)

IT 951660-49-4DP, hydrolyzed products 951660-52-9DP, hydrolyzed products 951660-62-1DP, hydrolyzed products
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. and patterning method)

IT 66003-78-9 144317-44-2 177034-80-9 197447-16-8 241806-75-7 258872-05-8 389859-76-1 ***808752-25-2*** 863024-59-3 951660-51-8D, hydrolyzed products 951660-53-0D, hydrolyzed products 951660-55-2D, hydrolyzed products 951660-57-4D, hydrolyzed products 951660-59-6D, hydrolyzed products 951660-61-0D, hydrolyzed products 951660-63-2 951660-64-3 951660-66-5D, hydrolyzed products 951660-68-7D, hydrolyzed products 951660-70-1D, hydrolyzed products
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and patterning method)

IT 18995-35-2P, p-tert-Butoxychlorobenzene 51503-08-3P, p-tert-Butoxybenzyl alcohol 57699-45-3P, p-tert-Butoxybenzaldehyde 60958-26-1P 300683-51-6P 951660-44-9P 951660-45-0P 951660-46-1P 951660-47-2P 951660-48-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of pos. resist compn.)

IT 106-48-9, p-Chlorophenol 1075-49-6, p-Vinylbenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of pos. resist compn.)

L14 ANSWER 30 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1092997 CAPLUS <<LOGINID::20080627>>
DN 147:395161
ED Entered STN: 28 Sep 2007
TI Positive photoresist composition and immersion lithographic pattern formation method using the same for semiconductor fabrication
IN Kamimura, Sou; Sasaki, Tomoya; Kawanishi, Yasutomo; Wada, Kenji
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DT Patent
LA English
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070224540	A1	20070927	US 2007-727267	20070326
	JP 2007293250	A	20071108	JP 2006-257965	20060922
	KR 2007096977	A	20071002	KR 2007-29968	20070327
	EP 1840651	A1	20071003	EP 2007-6249	20070327
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
PRAI	JP 2006-86217	A	20060327		
	JP 2006-257965	A	20060922		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070224540	INCL	430270100
	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
	ECLA	G03F007/004D; G03F007/039C
JP 2007293250	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; G03F007/039C
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB28; 2H025/CC20; 2H025/FA17
KR 2007096977	IPCI	G03F0007-039 [I,A]
EP 1840651	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	G03F007/004D; G03F007/039C

OS MARPAT 147:395161
GI

/ Structure 25 in file .gra /

AB This invention is a pos. resist compn. comprising: a photoacid generating sulfonium compd. having a structure represented by the formula I, where Y1-13 = hydrogen or alkyl and Z = single bond or covalent connecting group; a low mol. wt. binder which increases soly. in an alkali developing soln. by an action of an acid; and a compd. which generates a compd. having a structure represented by the formula QA(X)nBR, where Q = sulfo or carboxyl, A = divalent connecting group, X = sulfonyl or carbonyl, n = 0-1, B = single bond, oxygen, or primary or secondary nitrogen, R = hydrogen or monovalent org. group. The above described photoresist compn. is used in a lithog. pattern forming method for semiconductor device fabrication.

ST pos photoresist photoacid generator immersion lithog semiconductor

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg.; pos. photoresist compn.)

IT Lithography
(immersion; pos. photoresist compn.)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-; pos. photoresist compn.)

IT Positive photoresists
Semiconductor device fabrication
(pos. photoresist compn.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn.)

IT 279244-37-0P 903905-08-8P 903905-26-0P 903905-27-1P 903905-29-3P 950748-28-4P 950748-29-5P 950748-33-1P 950748-37-5P 950748-53-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresist compn.)

IT ***950748-35-3***
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(pos. photoresist compn.)

IT 903905-25-9
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn.)

IT 64-19-7, Acetic acid, reactions 76-05-1, reactions 90-90-4 92-85-3, Thianthrene 121-44-8, reactions 375-73-5 407-25-0 1135-40-6 2362-50-7 3353-89-7 4897-50-1, 1,4'-Bipiperidine 7283-41-2, Thiosalicylic acid 25601-74-5 27011-90-1 68399-77-9 82727-16-0 126395-12-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos. photoresist compn.)

IT 484-47-9, 2,4,5-Triphenylimidazole 1116-76-3, Trioctylamine 3001-72-7, 1,5-Diazabicyclo[4.3.0]-5-nonene 24424-99-5 65338-98-9 122035-62-5 137462-24-9, Megafac F 176 212555-24-3 220207-55-6 231280-30-1 249562-86-5 341979-02-0 868628-70-0 903905-32-8 906553-80-8 910130-28-8 910917-73-6 910917-92-9 945617-69-6 950748-38-6 950748-39-7 950748-40-0 950748-42-2 950748-44-4 950748-47-7 950748-48-8 950748-50-2 950748-52-4
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn.)

L14 ANSWER 31 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1089208 CAPLUS <<LOGINID::20080627>>
DN 147:416410
ED Entered STN: 28 Sep 2007
TI Positive-working photosensitive composition and patterning method
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 39pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007249024	A	20070927	JP 2006-75066	20060317
PRAI JP 2006-75066		20060317		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007249024	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17

AB The invention is concerned about a photosensitive compn. comprising (A) a radiation-sensitive acid generator and (B) a polymer contg. two kinds of hydroxy-contg. structural repeating units. A patterning method using the compn. is also claimed.
ST pos photoresist hydroxy polymer
IT Positive photoresists
(pos.-working photosensitive compn. and patterning method)
IT 102-71-6, Triethanolamine, uses 120-07-0, N-Phenyldiethanolamine 613-29-6, N,N-Dibutylaniline 716-79-0, 2-Phenylbenzimidazole 19600-49-8, Triphenylsulfonium acetate 24544-04-5, 2,6-Diisopropylaniline 66003-78-9 70384-51-9 144317-44-2 209482-18-8 258879-89-9 284474-28-8 309751-48-2 340964-38-7 341979-02-0 364736-22-1 479628-12-1 610300-93-1 690258-44-7 ***808752-25-2*** 852572-15-7 863024-59-3 879180-00-4 902096-34-8 926668-17-9 951022-73-4 951024-88-7
RL: TEM (Technical or engineered material use); USES (Uses)
(pos.-working photosensitive compn. and patterning method)

L14 ANSWER 32 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1089200 CAPLUS <<LOGINID::20080627>>
DN 147:407498
ED Entered STN: 28 Sep 2007
TI The positive photosensitive composition for pattern formation
IN Tarutani, Shinji; Tsubaki, Hideaki; Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 53pp.
CODEN: JKXXAF

DT Patent
LA Japanese
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 74

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007249074	A	20070927	JP 2006-75532	20060317
PRAI JP 2006-75532		20060317		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007249074	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17

AB The pos. type photosensitive compn. used for other photo-fabrication processes, circuit boards, semiconductor etc. with outstanding line width roughness (LWR) ability comprises (A) a compd. which generates acids by irradn (B1) a resin contg. polycyclic aliph. group repeat unit and (B-2) a a resin contg. lactone repeat unit.

ST pos photosensitive compn pattern formation

IT Crosslinking catalysts
(photochem.; pos. photosensitive compn. for pattern formation)

IT 144317-44-2 309751-48-2 460731-17-3 ***808752-25-2***
852572-15-7 863024-59-3 935536-48-4
RL: CAT (Catalyst use); USES (Uses)
(pos. photosensitive compn. for pattern formation)

IT 951010-71-2P 951010-72-3P 951010-73-4P 951010-74-5P 951010-75-6P
951010-76-7P 951010-77-8P 951016-96-9P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photosensitive compn. for pattern formation)

IT 443667-48-9P 460754-13-6P 471257-29-1P 471257-33-7P 884317-88-8P
911849-53-1P 951010-55-2P 951010-56-3P 951010-57-4P 951010-58-5P
951010-59-6P 951010-60-9P 951010-61-0P 951010-62-1P 951010-64-3P
951010-65-4P 951010-66-5P 951010-67-6P 951010-68-7P 951010-69-8P
951010-70-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(pos. photosensitive compn. for pattern formation)

L14 ANSWER 33 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1060952 CAPLUS <<LOGINID::20080627>>
DN 147:386431
ED Entered STN: 21 Sep 2007
TI Preparation of phenyl-sulfonium salts as a photo-acid-generators in production of photosensitive co-polymers with polyhydroxystyrene
IN Iwabuchi, Jun; Osawa, Yosuke
PA Toyo Gosei Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 9pp.
CODEN: USXXCO
DT Patent

LA English
INCL -544; -568
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 25
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070219368	A1	20070920	US 2007-724221	20070315
	JP 2007277219	A	20071025	JP 2006-355579	20061228
	KR 2007094552	A	20070920	KR 2007-26058	20070316
PRAI	JP 2006-73441	A	20060316		
	JP 2006-355579	A	20061228		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070219368	INCL	-544; -568
	IPCI	C07D0285-00 [I,A]; C07C0319-00 [I,A]
	IPCR	C07D0285-00 [I,C]; C07D0285-00 [I,A]; C07C0319-00 [I,C]; C07C0319-00 [I,A]
	NCL	544/005.000; 430/270.100; 568/045.000
JP 2007277219	IPCI	C07C0381-12 [I,A]; C07C0381-00 [I,C*]; C07C0309-06 [I,A]; C07C0309-31 [I,A]; C07C0309-00 [I,C*]; G03F0007-004 [I,A]; C07D0285-00 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	C07C0381-00 [I,C]; C07C0381-12 [I,A]; C07C0309-00 [I,C]; C07C0309-06 [I,A]; C07C0309-31 [I,A]; C07D0285-00 [I,C]; C07D0285-00 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/BE07; 2H025/BF15; 2H025/BG00; 2H025/FA12; 4C036/AD02; 4C036/AD04; 4C036/AD18; 4C036/AD25; 4H006/AA01; 4H006/AA03; 4H006/AB76; 4H006/AB80; 4H006/TN30
KR 2007094552	IPCI	C07C0323-18 [I,A]; C07C0323-00 [I,C*]; C07C0321-24 [I,A]; C07C0321-00 [I,C*]

OS MARPAT 147:386431
GI

/ Structure 26 in file .gra /

AB Sulfonium salts I, wherein R1 represents a linear or branched C2 to C9 divalent hydrocarbon group; each of R2 to R5 represents a hydrogen atom or a linear or branched C1 to C3 hydrocarbon group; each of R6 and R7 represents an org. group; R6 and R7 may be linked together to form a divalent org. group; and X- represents an anion, were prepd. as photo-acid-generators, the sulfonium salt not raising the problem of poor compatibility to a photo-resist polymer having an acid-dissociable group. Thus, phenyl-sulfonium salt II was prepd. by condensation of 4-hydroxyphenyldiphenylsulfonium perfluorobutanesulfonate salt with chloroethyl vinyl ether. Co-polymn of II with polyhydroxystyrene gave the corresponding photosensitive co-polymer.

ST copolymn addn vinyl phenyl sulfonium photosensitive polymer prepn soly; phenyl sulfonium photo acid generator photosensitive polymer prepn soly

IT Polymerization

(co-; prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT Addition reaction
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT Sulfonium compounds
RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT Polymers, preparation
RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT 12112-67-3
RL: CAT (Catalyst use); USES (Uses)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT 950193-21-2P 950193-24-5P 950193-27-8P 950193-30-3P 950193-33-6P ***950193-35-8P*** 950193-37-0P
RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT 950193-20-1P 950193-23-4P 950193-26-7P 950193-29-0P 950193-32-5P ***950193-34-7P*** 950193-36-9P 950193-38-1P ***950193-39-2P***
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT 646-06-0, 1,3-Dioxolane 84540-57-8
RL: NUU (Other use, unclassified); USES (Uses)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT 108-95-2, Phenol, reactions 110-75-8 945-51-7, Diphenyl sulfoxide 23144-52-7, 8-Chloro-1-octanol 59269-51-1, Polyhydroxystyrene 240424-21-9 391232-41-0 528593-34-2 588668-97-7 950193-40-5 950193-41-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)
IT 110-18-9, N,N,N',N'-Tetramethylethylenediamine
RL: RGT (Reagent); RACT (Reactant or reagent)
(prepn. of phenyl-sulfonium salts as a photo-acid-generators in prodn. of photosensitive co-polymers with polyhydroxystyrene)

L14 ANSWER 34 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1060084 CAPLUS <<LOGINID::20080627>>
DN 147:395138
ED Entered STN: 21 Sep 2007
TI Resist compositions for extreme ultraviolet lithography
IN Tamura, Minoru; Suzuki, Kaoru; Kaneko, Ikuhiro; Horibe, Mineko; Uno, Akinori; Kubo, Yoshiyasu; Kinoshita, Hiroo; Watanabe, Takeo
PA Lion Corp., Japan; Hyogo Prefecture
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF

DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007241121	A	20070920	JP 2006-66513	20060310
PRAI JP 2006-66513		20060310		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007241121	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/BJ10; 2H025/CB14; 2H025/CB16; 2H025/CB17; 2H025/CB41; 2H025/CB54; 2H025/CC20

OS MARPAT 147:395138

AB The resist compns. contain a core-shell hyperbranched polymer bearing a shell contg. acid-dissociable units (e.g., derived from tert-Bu vinylbenzoate) and a specified sulfonium or iodonium compd. as photoacid generators (PAG). The resist compns. show improved sensitivity and line edge roughness.

ST acid dissociable core shell hyperbranched polymer photoresist EUV lithog; sulfonium compd photoacid generator photoresist EUV lithog; sensitivity line edge roughness improvement photoresist EUV lithog

IT Dendrimers
RL: TEM (Technical or engineered material use); USES (Uses)
(hyperbranched polymers, core-shell; photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

IT Onium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(iodonium; photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

IT Photolithography
Photoresists
(photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

IT Sulfonium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

IT 101-82-6, 2-Benzylpyridine 122-39-4, Diphenylamine, uses 1116-76-3, Trioctylamine 6837-24-7, 1-Cyclohexyl-2-pyrrolidinone
RL: TEM (Technical or engineered material use); USES (Uses)
(acid quencher; photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

IT 9080-67-5P, Polychloromethylstyrene
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(cores, core-shell hyperbranched polymers; photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

IT 393110-05-9 460731-17-3 460731-18-4 460731-32-2 524067-95-6

808752-25-2
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)
IT 25232-27-3DP, tert-Butyl acrylate, homopolymer, hydrolyzed 91380-16-4DP, tert-Butyl 4-vinylbenzoate, homopolymer, hydrolyzed 950194-47-5DP, tert-Butyl acrylate-tert-butyl 4-vinylbenzoate copolymer, hydrolyzed
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(shells, core-shell hyperbranched polymers; photoresist compns. with improved sensitivity and line edge roughness for extreme UV lithog.)

L14 ANSWER 35 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1060027 CAPLUS <<LOGINID::20080627>>
DN 147:395135
ED Entered STN: 21 Sep 2007
TI Positive-working photosensitive resin composition and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication
IN Kodama, Kunihiko; Yamamoto, Satoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007240977	A	20070920	JP 2006-64607	20060309
PRAI JP 2006-64607		20060309		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007240977	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-10 [I,A]; C08F0220-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-10 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL26P; 4J100/AL26Q; 4J100/AL26R; 4J100/AL31P; 4J100/AL31Q; 4J100/AL31R; 4J100/BA02P; 4J100/BA03R; 4J100/BA04P; 4J100/BA05R; 4J100/BA11R; 4J100/BA15R; 4J100/BA16R; 4J100/BC02P; 4J100/BC02Q; 4J100/BC03P; 4J100/BC03Q; 4J100/BC04P; 4J100/BC04Q; 4J100/BC07P; 4J100/BC08P; 4J100/BC08R; 4J100/BC09P; 4J100/BC09Q; 4J100/BC09R; 4J100/BC12P; 4J100/BC12R; 4J100/BC53R; 4J100/CA03; 4J100/JA38

GI

AB The invention relates to a chem. amplification type pos.-working photoresist compn. comprising a photoacid generator and a resin component, wherein the resin component is made up of an acid-decomposable structural repeating unit and an acid-non-decomposable structural repeating unit represented by I (X = H, alkyl, cyano, halo; R1-3 = H, alkyl, cycloalkyl; Z = cycloalkyl; n = 0-6).

ST pos working photosensitive resin compn photoresist pattern formation

IT Photoimaging materials
(photopolymerizable; pos.-working photosensitive resin compn. and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication)

IT Positive photoresists
Semiconductor device fabrication
(pos.-working photosensitive resin compn. and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication)

IT 66003-78-9 144317-44-2 209482-18-8 284474-28-8 309751-48-2
341979-02-0 479628-12-1 ***808752-25-2*** 852572-15-7
863024-59-3 879180-00-4 902096-34-8
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; pos.-working photosensitive resin compn. and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication)

IT 950490-57-0P 950490-60-5P 950490-62-7P 950490-64-9P 950490-66-1P
950490-68-3P 950490-70-7P 950490-71-8P 950490-72-9P 950490-73-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working photosensitive resin compn. and its use for .ltoreq.100 nm line-and-space pattern formation in semiconductor device fabrication)

L14 ANSWER 36 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1053324 CAPLUS <<LOGINID::20080627>>
DN 147:374542
ED Entered STN: 20 Sep 2007
TI Positive photoresist composition and pattern forming lithographic method using the positive resist composition
IN Iwato, Kaoru; Kodama, Kunihiko
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 62pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1835340	A1	20070919	EP 2007-4888	20070309
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007249025	A	20070927	JP 2006-75068	20060317
	KR 2007094548	A	20070920	KR 2007-26049	20070316

US 20080044760 A1 20080221 US 2007-723144 20070316
PRAI JP 2006-75068 A 20060317
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1835340	IPCI	G03F0007-039 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	G03F007/039C; G03F007/039C1S
JP 2007249025	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-36 [I,A]; C08F0220-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-36 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	ECLA	G03F007/039C; G03F007/039C1S
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC03; 2H025/FA17; 4J100/AL08P; 4J100/BA11P; 4J100/BA40P; 4J100/BC53P; 4J100/CA04; 4J100/CA05; 4J100/JA38
KR 2007094548	IPCI	G03F0007-039 [I,A]; G03F0007-00 [I,A]
US 20080044760	IPCI	G03C0001-00 [I,A]
	NCL	430/270.100
	ECLA	G03F007/039C; G03F007/039C1S

AB This invention is a pos. photoresist compn. comprising: a resin which increases soly. in an alkali developing soln. by an action of an acid and comprises a repeating unit contg. a lactone structure and a cyano group and a repeating unit contg. a first acid-decomposable group; a resin which increases soly. in an alkali developing soln. by an action of an acid and comprises a repeating unit contg. a lactone structure and a cyano group and a repeating unit contg. a second acid-decomposable group which is different from the first acid-decomposable group; a compd. which generates an acid upon irradn. of an actinic ray or a radiation; and a solvent. This photoresist is used for lithog. pattern forming fabrication of semiconductor devices.

ST pos photoresist lithog resin photoacid generating pattern semiconductor fabrication

IT Lithography
(far UV; pos. photoresist compn.)

IT Positive photoresists
Semiconductor device fabrication
(pos. photoresist compn.)

IT 926668-17-9P 929197-00-2P 949567-32-2P 949567-33-3P 949567-34-4P 949567-35-5P 949567-36-6P 949567-37-7P 949567-38-8P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresist compn.)

IT 102-71-6, Triethanolamine, uses 613-29-6, Dibutylaniline 1116-76-3, Trioctylamine 18608-94-1 24544-04-5, 2,6-Diisopropylaniline 52991-23-8, Dihydroxyethylaniline 66003-78-9 101431-08-7 209482-18-8 211919-60-7 284474-28-8 301664-71-1 308141-03-9 ***862261-51-6*** 935536-48-4 935536-51-9
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fuji Photo Film Co Ltd; EP 1515186 A 2005 CAPLUS
(2) Fujifilm Corporation; EP 1783550 A 2007 CAPLUS

(3) Ibm Corp; JP 2004012545 A 2004 CAPLUS
(4) Mitsubishi Rayon Co Ltd; WO 2004067592 A 2004 CAPLUS

L14 ANSWER 37 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1052597 CAPLUS <<LOGINID::20080627>>
DN 147:374541
ED Entered STN: 20 Sep 2007
TI Positive photoresist composition and lithographic pattern forming method using the positive resist composition for semiconductor device fabrication
IN Iwato, Kaoru; Kodama, Kunihiko; Yoshida, Yuko; Yamamoto, Kei
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 66pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 76
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1835343	A1	20070919	EP 2007-5242	20070314
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007279662	A	20071025	JP 2006-245681	20060911
	US 20070218405	A1	20070920	US 2007-717083	20070313
	KR 2007094547	A	20070920	KR 2007-26007	20070316
PRAI	JP 2006-75067	A	20060317		
	JP 2006-245681	A	20060911		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1835343	IPCI	G03F0007-039 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]
JP 2007279662	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BF02; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC03; 2H025/CC20
US 20070218405	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
	ECLA	G03F007/039C1S; G03F007/004D
KR 2007094547	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]

GI

/ Structure 28 in file .gra /

AB This invention is a pos. resist compn. comprising: a resin which increases

soly. in an alkali developing soln. by an action of an acid; a repeating unit contg. a lactone structure and a cyano group; and one or more monomers represented by the formulas -CR12R13R14, -CHR16OR15, -CR19R21CR17=CR18R20, and -CR22R25CHR23C(:O)R24, where R11 = alkyl, cycloalkyl; Z = group forming cycloalkyl; R12-16 = alkyl or cycloalkyl, R15-16 = cycloalkyl, R17-21 = alkyl or cycloalkyl and R22-25 = hydrogen, alkyl or cycloalkyl or ring forming. This invention also includes a compd. which generates an acid upon irradn. of an actinic ray or a radiation; and a solvent. This invention's far UV lithog. pattern forming method is used for semiconductor device fabrication.

ST pos photoresist far UV lithog pattern forming semiconductor resin; photoacid generating resin photoresist

IT Lithography
(far UV; pos. photoresist compn.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg.; pos. photoresist compn.)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-; pos. photoresist compn.)

IT Positive photoresists
Semiconductor device fabrication
(pos. photoresist compn.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn.)

IT 929197-01-3P 949568-71-2P 949568-72-3P 949568-73-4P 949568-73-4P
949568-74-5P 949568-75-6P 949568-76-7P 949568-77-8P 949568-78-9P
949568-79-0P 949568-80-3P 949568-81-4P 949568-82-5P 949568-83-6P
949568-85-8P 949568-86-9P 949568-87-0P 949568-89-2P 949568-90-5P
949568-91-6P 949568-92-7P 949568-93-8P 949568-94-9P 949568-95-0P
949568-96-1P 949568-98-3P 949568-99-4P 949569-00-0P 949569-01-1P
949569-02-2P 949569-03-3P 949569-04-4P 949569-05-5P 949569-06-6P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresist compn.)

IT 102-71-6, Triethanolamine, uses 484-47-9 613-29-6, Dibutylaniline
1116-76-3, Trioctylamine 24544-04-5, 2,6-Diisopropylaniline
52991-23-8, Dihydroxyethylaniline 101431-08-7 137462-24-9, Megafac F 176 209482-15-5 211919-60-7 284474-28-8 301664-71-1 308141-03-9
309751-48-2 341979-02-0 353263-83-9 ***808752-25-2***
862261-51-6 935536-48-4 935536-51-9
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn.)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; EP 1457822 A 2004 CAPLUS
(2) Fuji Photo Film Co Ltd; EP 1580598 A 2005 CAPLUS
(3) Fuji Photo Film Co Ltd; EP 1621927 A 2006 CAPLUS
(4) Fujifilm Corp; EP 1764652 A 2007 CAPLUS
(5) Hatakeyama Jun; US 2003224291 A1 2003
(6) Ibm; WO 03001294 A 2003 CAPLUS
(7) Shinetsu Chemical Co; JP 2005008765 A 2005 CAPLUS

L14 ANSWER 38 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1029166 CAPLUS <<LOGINID::20080627>>
DN 147:374534

ED Entered STN: 14 Sep 2007
TI Photosensitive photoresist composition as part of pattern-forming immersion lithographic method for manufacture of semiconductor devices
IN Wada, Kenji
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 74pp.
CODEN: USXXCO
DT Patent
LA English
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20070212645	A1	20070913	US 2007-716054	20070309
JP 2007240978	A	20070920	JP 2006-64608	20060309

PRAI JP 2006-64608 A 20060309
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070212645	INCL	430270100
	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
JP 2007240978	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AB16; 2H025/AB17; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB52; 2H025/CC20; 2H025/FA12

OS MARPAT 147:374534
AB This invention is a photosensitive photoresist compn. for immersion lithog. method for manuf. of semiconductor devices which comprises a compd. capable of generating an org. acid represented by the formula Z-A-X-B-R-(Y)n upon irradn. with actinic ray or radiation. In the above formula, Z represents an org. acid group; A represents a divalent linking group; X represents a divalent linking group having a hetero atom; B represents an oxygen atom or -N(Rx)-; Rx represents a hydrogen atom or a monovalent org. group; R represents a monovalent org. group substituted with Y, and when B represents -N(Rx)-, R and Rx may be bonded to each other to form a cyclic structure; Y represents -COOH or -CHO, and when a plurality of Y's are present, the plurality of Y's may be the same or different; and n represents an integer of from 1 to 3.
ST photoresist photosensitive semiconductor device immersion lithog pattern forming
IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg.; photosensitive photoresist compn. for immersion lithog.)
IT Lithography
(immersion; photosensitive photoresist compn. for immersion lithog.)
IT Photoimaging materials

Photoresists
Semiconductor devices
(photosensitive photoresist compn. for immersion lithog.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive photoresist compn. for immersion lithog.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyoxyalkylene-; photosensitive photoresist compn. for immersion lithog.)

IT Fluoropolymers, uses
Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-; photosensitive photoresist compn. for immersion lithog.)

IT 24979-69-9P 24979-70-2P 249743-11-1P 258879-87-7P 289623-64-9P
321164-59-4P 359635-35-1P 366808-82-4P 398140-43-7P 398140-69-7P
482609-97-2P 508210-04-6P 524699-47-6P 607357-61-9P 610300-92-0P
610300-93-1P 610300-94-2P 610300-96-4P 615278-35-8P 845795-93-9P
848408-51-5P 848408-52-6P 881659-08-1P 881659-11-6P 881659-13-8P
902129-96-8P 908124-74-3P 910606-41-6P 911849-54-2P 949096-79-1P
949096-80-4P 949096-81-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive photoresist compn. for immersion lithog.)

IT 120-47-8 123-08-0 10537-86-7 146829-75-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(photosensitive photoresist compn. for immersion lithog.)

IT 120-07-0 484-47-9, 2,4,5-Triphenylimidazole 621-77-2, Tripentylamine 1116-76-3, Trioctylamine 1672-63-5, 4-Hydroxyantipyrine 2052-49-5, Tetrabutylammonium hydroxide 3001-72-7 3040-44-6, 1-Piperidineethanol 3089-11-0 4356-60-9 7560-83-0, Dicyclohexylmethylamine 19600-49-8, Triphenylsulfonium acetate 24544-04-5, 2,6-Diisopropylaniline 70384-51-9 137462-24-9, Megafac F 176 144317-44-2 153698-46-5 161679-94-3 162846-57-3 162846-59-5 185502-14-1 284474-28-8 309751-48-2 312620-54-5 398141-17-8 ***808752-25-2*** 852572-15-7 865721-39-7 867373-16-8 867373-18-0 902096-34-8 903905-33-9 949096-85-9 949096-88-2
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive photoresist compn. for immersion lithog.)

L14 ANSWER 39 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1027705 CAPLUS <<LOGINID::20080627>>
DN 147:374528
ED Entered STN: 13 Sep 2007
TI Photosensitive composition containing triarylsulfonium acid generating agent and method of forming pattern using the same
IN Kawanishi, Yasuhiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 85pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	JP 2007232769	A	20070913	JP 2006-50795	20060227
PRAI	JP 2006-50795		20060227		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007232769	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/FA12

OS MARPAT 147:374528

GI

/ Structure 29 in file .gra /

AB Disclosed is a photosensitive compn. for resists comprising a triarylsulfonium photoacid represented by I (R1-15 = H, substituent; .gtoreq.1 R1-5 is substituent contg. alc. OH; and X- = counter ion).

ST photosensitive compn triarylsulfonium photoacid acid generating agent; photoresist electron beam resist x ray

IT Electron beam resists
Photoresists
X-ray resists
(Photosensitive compn. for resist contg. triarylsulfonium acid generating agent)

IT 949165-20-2P 949165-24-6P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Photosensitive compn. for resist contg. triarylsulfonium acid generating agent)

IT 949165-21-3 ***949165-23-5*** 949165-26-8 ***949165-28-0*** 949165-30-4 949165-31-5
RL: TEM (Technical or engineered material use); USES (Uses)
(Photosensitive compn. for resist contg. triarylsulfonium acid generating agent)

IT 313-50-8, Pentafluorobenzenesulfonic acid 945-51-7 6192-44-5 63877-57-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of triarylsulfonium acid generating agent)

L14 ANSWER 40 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:942790 CAPLUS <<LOGINID::20080627>>
DN 147:311278
ED Entered STN: 24 Aug 2007
TI Photosensitive composition for photoresist, immersion lithography pattern-forming method using the photosensitive composition and compounds used in the photosensitive composition.

IN Wada, Kenji
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 73pp.
CODEN: USXXCO
DT Patent
LA English
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20070196766	A1	20070823	US 2007-708017	20070220
JP 2007219411	A	20070830	JP 2006-42691	20060220
PRAI JP 2006-42691	A	20060220		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070196766	INCL	430270100
	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
JP 2007219411	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB03; 2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/FA03

AB The invention includes a photoresist photosensitive compn., which comprises a compd. capable of generating an org. acid represented by Zn-CH-XR3-n, wherein Z represents a monovalent org. group, (when two Z's are present, the two Z's may be the same or different, and they may be bonded to each other to form a cyclic structure); X represents -CO- or -SO2-, (when two X's are present, the two X's may be the same or different); R represents a monovalent org. group, (when two R's are present, the two R's may be the same or different, and they may be bonded to each other to form a cyclic structure); Z and R may be bonded to each other to form a cyclic structure; and n represents an integer of 1 or 2; and the compd. capable of generating the org. acid represented by the above formula. The invention also includes using the photosensitive compn. in an immersion lithog. pattern-forming method.

ST photosensitive photoresist pattern forming immersion lithog

IT Light-sensitive materials
Photoresists
(components for pattern forming immersion lithog. photoresist)

IT Lithography
(immersion; components for pattern forming immersion lithog. photoresist)

IT 3089-11-0 4356-60-9 24979-69-9 24979-70-2 24979-74-6 144317-44-2
153698-46-5 158593-28-3 161679-94-3 162846-57-3 162846-59-5
171429-59-7 185502-14-1 200808-68-0 249743-11-1 258879-87-7
284474-28-8 289623-64-9 300374-81-6 309751-48-2 312620-54-5
321164-59-4 359635-35-1 366808-82-4 376348-94-6 393110-05-9
398140-43-7 398140-45-9 398140-69-7 474510-73-1 482609-97-2

508210-04-6 524699-47-6 541547-03-9 610300-92-0 610300-93-1
615278-35-8 677351-20-1 ***808752-25-2*** 845795-93-9
848408-51-5 848408-52-6 852245-71-7 862997-27-1 867373-16-8
867373-18-0 879180-00-4 880873-54-1 881659-08-1 881659-11-6
881659-13-8 902096-34-8 902129-96-8 903905-33-9 903905-40-8
908124-74-3 910606-41-6 911849-54-2 917102-70-6 926925-05-5
946863-40-7 946863-41-8 946863-42-9 946863-43-0
RL: TEM (Technical or engineered material use); USES (Uses)
(components for pattern forming immersion lithog. photoresist)

L14 ANSWER 41 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:815779 CAPLUS <<LOGINID::20080627>>
DN 147:200055
ED Entered STN: 27 Jul 2007
TI Positive photosensitive photoresist composition and far-UV lithographic method of forming pattern for semiconductor device fabrication
IN Takahashi, Hyou; Sugimoto, Naoya; Kodama, Kunihiko; Yamamoto, Kei
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 85pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1811341	A1	20070725	EP 2007-1487	20070124
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
JP 2007272194	A	20071018	JP 2007-12723	20070123
US 20070172761	A1	20070726	US 2007-657106	20070124
KR 2007077796	A	20070727	KR 2007-7648	20070124
PRAI JP 2006-15348	A	20060124		
JP 2006-64476	A	20060309		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1811341	IPCI	G03F0007-039 [I,A]
JP 2007272194	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-18 [I,A]; C08F0220-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-18 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BF02; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB43; 2H025/CB45; 2H025/CC20; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL08S; 4J100/BA03R; 4J100/BA11P; 4J100/BA40P; 4J100/BA40R; 4J100/BC03Q; 4J100/BC04Q; 4J100/BC07S; 4J100/BC08P; 4J100/BC08Q; 4J100/BC08R; 4J100/BC09Q; 4J100/BC09R; 4J100/BC12S; 4J100/BC52P; 4J100/BC53P; 4J100/BC58P; 4J100/CA04; 4J100/CA06; 4J100/JA38
US 20070172761	IPCI	G03C0001-00 [I,A]

IPCR G03C0001-00 [I,C]; G03C0001-00 [I,A]
NCL 430/270.100
KR 2007077796 IPCI G03F0007-004 [I,A]; G03F0007-039 [I,A]
GI

/ Structure 30 in file .gra /

AB A pos. photoresist photosensitive compn. includes: a resin (A) whose dissoln. rate in an alk. developing soln. increases by the action of an acid, the resin (A) contg. an acid decomposable repeating unit represented by a general formula I and an acid nondecomposable repeating unit represented by a general formula II; and a compd. (B) capable of generating an acid upon irradn. with one of active rays and radiations: wherein Xa1 represents one of a hydrogen atom, an alkyl group, a cyano group, and a halogen atom, A1 represents one of a single bond and a divalent connecting group, ALG represents an acid leaving hydrocarbon group, Xa2 represents one of a hydrogen atom, an alkyl group, a cyano group, and a halogen atom, A2 represents one of a single bond and a divalent connecting group, and ACG represents an acid nonleaving hydrocarbon group. The photoresist of this invention is used for the manuf. of semiconductor devices using far UV lithog. for patterning.
ST pos photoresist photosensitive resin lithog far UV patterning
IT Lithography
(far UV; pos. photosensitive photoresist compn. for far UV lithog. method)
IT Semiconductor device fabrication
(pos. photosensitive photoresist compn. for far UV lithog. method)
IT Positive photoresists
(resin; pos. photosensitive photoresist compn. for far UV lithog. method)
IT 66003-78-9 144089-15-6 144317-44-2 153698-46-5 209482-18-8
227199-92-0 241806-75-7 284474-28-8 309751-48-2 341979-02-0
389859-76-1 425670-64-0 460731-17-3 474516-38-6 479628-12-1
680200-03-7 ***808752-25-2*** ***862261-51-51-6*** 863024-59-3
865721-16-0 867373-18-0 ***868610-05-3*** 879180-00-4
880874-04-4 935536-50-8 935536-51-9 944477-45-6 944477-48-9
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photosensitive photoresist compn. for far UV lithog. method)
IT 348631-34-5P 537706-04-0P 610300-93-1P 849023-50-3P 936562-61-7P
944477-20-7P 944477-22-9P 944477-23-0P 944477-24-1P 944477-25-2P
944477-26-3P 944477-27-4P 944477-28-5P 944477-29-6P 944477-31-0P
944477-33-2P 944477-35-4P 944477-37-6P 944477-38-7P 944477-39-8P
944477-40-1P 944477-41-2P 944477-43-4P 944477-52-5P 944477-53-6P
944477-54-7P 944477-55-8P 944477-56-9P 944477-57-0P 944477-58-1P
944477-59-2P 944477-60-5P 944477-61-6P 944477-62-7P 944477-63-8P
944477-64-9P 944478-27-7P 944478-29-9P 944481-99-6P 944482-00-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin for pos. photosensitive photoresist compn. for far UV lithog. method)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Chen Chi-Sheng; US 2003232270 A1 2003
(2) Fuji Photo Film Co Ltd; EP 0877293 A2 1998 CAPLUS
(3) Fuji Photo Film Co Ltd; EP 1684119 A 2006 CAPLUS

(4) Fujitsu Ltd; EP 0663616 A2 1995 CAPLUS
(5) Tokyo Ohka Kogyo Co Ltd; EP 1589375 A 2005 CAPLUS

L14 ANSWER 42 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:763858 CAPLUS <<LOGINID::20080627>>
DN 147:145042
ED Entered STN: 13 Jul 2007
TI Ink compositions containing cationically polymerizable compounds and acid-generating compounds for inkjet printing and for producing lithographic printing plates
IN Tsuchimura, Tomotaka
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 67pp.
CODEN: USXXCO
DT Patent
LA English
INCL 428195100; -347; -522
CC 42-12 (Coatings, Inks, and Related Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070160815	A1	20070712	US 2007-649808	20070105
	JP 2007186566	A	20070726	JP 2006-4729	20060112
	JP 2007238777	A	20070920	JP 2006-63475	20060309
	EP 1808466	A1	20070718	EP 2007-499	20070111
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
PRAI	JP 2006-4729	A	20060112		
	JP 2006-63475	A	20060309		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070160815	INCL	428195100; -347; -522
	IPCI	C08F0002-50 [I,A]; C08F0002-46 [I,C*]; B41J0002-14 [I,A]; B41M0005-00 [I,A]
	IPCR	C08F0002-46 [I,C]; C08F0002-50 [I,A]; B41J0002-14 [I,C]; B41J0002-14 [I,A]; B41M0005-00 [I,C]; B41M0005-00 [I,A]
	NCL	428/195.100; 347/052.000; 522/006.000
JP 2007186566	IPCI	C09D0011-00 [I,A]; B41M0005-00 [I,A]; B41J0002-01 [I,A]; B41C0001-10 [I,A]
	IPCR	C09D0011-00 [I,C]; C09D0011-00 [I,A]; B41C0001-10 [I,C]; B41C0001-10 [I,A]; B41J0002-01 [I,C]; B41J0002-01 [I,A]; B41M0005-00 [I,C]; B41M0005-00 [I,A]
	FTERM	2C056/EA21; 2C056/FC02; 2C056/HA44; 2H084/AA25; 2H084/AA30; 2H084/AE05; 2H084/BB02; 2H084/BB13; 2H084/CC05; 2H186/AA17; 2H186/AB11; 2H186/BA08; 2H186/DA18; 2H186/FB04; 2H186/FB08; 2H186/FB15; 2H186/FB40; 2H186/FB41; 2H186/FB42; 2H186/FB44; 2H186/FB45; 2H186/FB46; 2H186/FB54; 4J039/AD06; 4J039/AD17; 4J039/AD21; 4J039/AE05; 4J039/AE07; 4J039/AE11; 4J039/BC05; 4J039/BC33; 4J039/BC39; 4J039/BC54; 4J039/BC56; 4J039/BC59; 4J039/BE01; 4J039/BE02; 4J039/BE12; 4J039/BE22; 4J039/EA04; 4J039/EA36; 4J039/EA37; 4J039/GA24
JP 2007238777	IPCI	C09D0011-00 [I,A]; B41M0005-00 [I,A]; B41J0002-01

[I,A]; B41C0001-10 [I,A]
IPCR C09D0011-00 [I,C]; C09D0011-00 [I,A]; B41C0001-10 [I,C]; B41C0001-10 [I,A]; B41J0002-01 [I,C]; B41J0002-01 [I,A]; B41M0005-00 [I,C]; B41M0005-00 [I,A]
FTERM 2C056/EA04; 2C056/EC14; 2C056/FB01; 2C056/FC02; 2C056/HA44; 2H084/AA25; 2H084/AE05; 2H084/BB13; 2H084/CC05; 2H186/AA17; 2H186/AB11; 2H186/BA08; 2H186/BA10; 2H186/BA11; 2H186/DA10; 2H186/DA12; 2H186/DA15; 2H186/DA18; 2H186/FB04; 2H186/FB11; 2H186/FB15; 2H186/FB34; 2H186/FB36; 2H186/FB38; 2H186/FB40; 2H186/FB41; 2H186/FB42; 2H186/FB44; 2H186/FB45; 2H186/FB46; 2H186/FB54; 2H186/FB56; 4J039/AD21; 4J039/AE05; 4J039/AE07; 4J039/BC56; 4J039/BC72; 4J039/BC73; 4J039/BC74; 4J039/BC76; 4J039/BC77; 4J039/BC78; 4J039/BC79; 4J039/BE01; 4J039/BE02; 4J039/EA04; 4J039/EA06; 4J039/EA37; 4J039/GA02; 4J039/GA24

EP 1808466 IPCI C09D0011-00 [I,A]

OS MARPAT 147:145042

AB An ink compn. is provided that includes (A) an acid-generating compd. having a sulfo or keto group-contg. anion, (B) a cationically polymerizable compd., and (C) a colorant.

ST ink cationic monomer acid generating compd

IT Monomers
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically polymerizable; ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT Coloring materials
Electroluminescent devices
Ink-jet printing
Inks
Lithographic plates
Pigments, nonbiological
(ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT Inks
(jet-printing, UV-curable; ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT 460731-32-2 933778-06-4 943790-29-2 943790-30-5 ***943790-31-6*** 943790-32-7 943790-34-9 943790-35-0 943790-36-1 943790-37-2 943790-38-3 943790-39-4 943790-40-7 943790-41-8 943790-42-9 943790-43-0
RL: TEM (Technical or engineered material use); USES (Uses)
(acid-generating compd.; ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT 147-14-8, C.I. Pigment Blue 15:3 5102-83-0, C.I. Pigment Yellow 13 5281-04-9, C.I. Pigment Red 57:1 13463-67-7, Titanium oxide, uses 18934-00-4, OXT-221 25085-98-7, Celloxide 2021A

RL: TEM (Technical or engineered material use); USES (Uses)
(ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT 473465-42-8 915972-60-0
RL: TEM (Technical or engineered material use); USES (Uses)
(pigment; ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

IT 86-74-8, 9H-Carbazole 103-30-0 120-12-7, Anthracene, uses 492-22-8, 9H-Thioxanthen-9-one 76275-14-4, 9,10-Dibutoxyanthracene
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizer; ink compns. contg. cationically polymerizable compds. and acid-generating compds. for inkjet printing and for producing lithog. printing plates)

L14 ANSWER 43 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:759240 CAPLUS <<LOGINID::20080627>>
DN 147:177056
ED Entered STN: 13 Jul 2007
TI Photosensitive compositions and pattern-forming method using them
IN Kawanishi, Yasuhiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 87pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007178858	A	20070712	JP 2005-379177	20051228
PRAI JP 2005-379177		20051228		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007178858	IPCI	G03F0007-004 [I,A]; C07C0381-12 [I,A]; C07C0381-00 [I,C*]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; C07C0381-00 [I,C]; C07C0381-12 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB17; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17; 4H006/AA03; 4H006/AB78

OS MARPAT 147:177056
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The compns. contain sulfonium compds. I (R1-R13 = H, substituent, where

.gtoreq.1 of R1-R13 being substituent bearing alkali-dissociable C.gtoreq.3 group; Z = single bond, divalent linking group) and II (R14-R28 = H, substituent, where .gtoreq.1 of R14-R28 being substituent bearing alkali-dissociable group; X- = anion) capable of generating acids upon exposure under actinic rays or radiation, and a resin, of which soly. in an alkali developer increases under action of an acid. The compns. are esp. suitable for use in X ray, liq. immersion, electron beam or extreme UV (EUV) lithog. to form high-resol. patterns.

ST sulfonium compd acid generator photoresist lithog pattern formation

IT Photolithography
Positive photoresists
(acid generators for photoresist compns. for forming high-resol. patterns)

IT Sulfonium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generators for photoresist compns. for forming high-resol. patterns)

IT Photoresists
(chem. amplified; acid generators for photoresist compns. for forming high-resol. patterns)

IT Photoresists
(dry-film; acid generators for photoresist compns. for forming high-resol. patterns)

IT 943922-75-6P 943922-76-7P 943922-82-5P 943922-83-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid generators for photoresist compns. for forming high-resol. patterns)

IT 24979-69-9, Poly(3-hydroxystyrene) 24979-70-2, VP 5000 177034-75-2 200808-68-0 249743-11-1 252570-50-6 279244-37-0 312620-54-5 321164-59-4, 4-Hydroxystyrene-1-vinylnaphthalene copolymer 372968-15-5 482609-97-2 610300-93-1 610300-94-2 845795-93-9 848408-51-5 848408-52-6 862261-72-1 862997-27-1 881659-08-1 902129-96-8 943922-49-4 943922-51-8 943922-54-1 943922-56-3 943922-58-5 943922-60-9 943922-62-1 943922-64-3 943922-66-5 943922-67-6 ***943922-69-8*** 943922-71-2 ***943922-73-4*** 943922-78-9 943922-80-3
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generators for photoresist compns. for forming high-resol. patterns)

IT 98-88-4, Benzoyl chloride 375-73-5, Nonafluorobutanesulfonic acid 576-26-1, 2,6-Xylenol 1013-23-6, Dibenzothiophene-S-oxide 1774-35-2, 4,4'-Dimethyldiphenylsulfoxide 3282-30-2, Pivaloyl chloride 56379-64-7 63877-57-6, 2,4,6-Triisopropylbenzenesulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of sulfonium compd. acid generators for photoresist compns.)

IT 943922-84-7P 943922-85-8P 943922-86-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonium compd. acid generators for photoresist compns.)

L14 ANSWER 44 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:759238 CAPLUS <<LOGINID::20080627>>
DN 147:177055
ED Entered STN: 13 Jul 2007
TI Photosensitive resin composition containing polybenzoxazole precursor and triacrylsulfonium salt and manufacture of semiconductor device using the

same
IN Sato, Kenichiro; Yamanaka, Tsukasa; Tsuchimura, Toshitaka
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 25pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007178849	A	20070712	JP 2005-379029	20051228
US 20070166643	A1	20070719	US 2006-645554	20061227
PRAI JP 2005-379029	A	20051228		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007178849	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AA10; 2H025/AB16; 2H025/AC01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CA00; 2H025/CB26; 2H025/CB41; 2H025/CC20; 2H025/FA17; 2H025/FA29
US 20070166643	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100

AB Disclosed is a photosensitive resin compn. comprising a polybenzoxazole precursor and a triacrylsulfonium salt, and a sensitizing agent.
ST photosensitive resin compn photoresist polybenzoxazole precursor triacrylsulfonium salt; semiconductor device fabrication
IT Photoimaging materials
Photoresists
Semiconductor device fabrication
(Photosensitive resin compn. contg. polybenzoxazole precursor and triacrylsulfonium salt for semiconductor device fabrication)
IT 125428-43-5P, Tris(4-chlorophenyl)sulfonium bromide
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(Photosensitive resin compn. contg. polybenzoxazole precursor and triacrylsulfonium salt for semiconductor device fabrication)
IT 745817-76-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Photosensitive resin compn. contg. polybenzoxazole precursor and triacrylsulfonium salt for semiconductor device fabrication)
IT 3085-42-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(Photosensitive resin compn. contg. polybenzoxazole precursor and triacrylsulfonium salt for semiconductor device fabrication)
IT 26708-04-3 76275-14-4 177034-80-9 479412-73-2 854602-01-0 943914-14-5 ***943914-15-6*** 943914-16-7
RL: TEM (Technical or engineered material use); USES (Uses)

(Photosensitive resin compn. contg. polybenzoxazole precursor and triacrylsulfonium salt for semiconductor device fabrication)

L14 ANSWER 45 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:759175 CAPLUS <<LOGINID::20080627>>
DN 147:154006
ED Entered STN: 13 Jul 2007
TI Chemically amplified positive-working resist compositions and method for their patterning
IN Iwato, Kaoru; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 72pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007178621	A	20070712	JP 2005-375705	20051227
PRAI JP 2005-375705		20051227		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007178621	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17

GI

/ Structure 31 in file .gra /

AB The compns. contain (A) polymers with .gtoreq.2 structural repeating units both contg. cyano groups with their .gtoreq.1 having lactone structure (A1), that increase their alk. soly. by acids and (B) compds. generating acids by actinic ray or radiation. Preferable Markush structures for (A1) are I and II (R1A-R6A, R18A = H, substitution group; .gtoreq.1 of R1A-R6A contains cyano; .gtoreq.2 of R1A-R6A may form ring; L1 = groups forming lactone ring; R18A and L1 may form ring). Photolithog. formation of patterns using the said compns. are also claimed. The compns. give patterns under excellent exposure latitude without scumming.

ST acrylic cyanolactone copolymer pos photoresist; chem amplified pos working photoresist patterning

IT Photolithography
(chem. amplified cyanolactone-contg. acrylic polymer pos.-working resist compns. and their patterning)

IT Positive photoresists
(chem. amplified; chem. amplified cyanolactone-contg. acrylic polymer

pos.-working resist compns. and their patterning)

IT 935536-18-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(chem. amplified cyanolactone-contg. acrylic polymer pos.-working resist compns. and their patterning)

IT 943305-94-0P 943305-95-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified cyanolactone-contg. acrylic polymer pos.-working resist compns. and their patterning)

IT 920-46-7, Methacrylic acid chloride 935536-17-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(chem. amplified cyanolactone-contg. acrylic polymer pos.-working resist compns. and their patterning)

IT 943236-39-3 943236-40-6 943236-41-7 943236-43-9 943236-45-1
943236-46-2 943236-47-3 943236-49-5 943236-51-9 943236-53-1
943236-54-2 943236-56-4 943236-58-6 943236-61-1 943236-63-3
943305-97-3 943305-99-5 943306-00-1 943306-02-3 943306-03-4
RL: TEM (Technical or engineered material use); USES (Uses)
(chem. amplified cyanolactone-contg. acrylic polymer pos.-working resist compns. and their patterning)

IT 66003-78-9 209482-18-8 284474-28-8 460731-17-3 474510-73-1
808752-25-2 852572-15-7 863024-59-3 ***868610-05-3***
935536-48-4 ***943236-37-1***
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; chem. amplified cyanolactone-contg. acrylic polymer pos.-working resist compns. and their patterning)

L14 ANSWER 46 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:507351 CAPLUS <<LOGINID::20080627>>
DN 146:472192
ED Entered STN: 10 May 2007
TI Chemically amplified positive-working resist compositions containing lactones as additives and method for formation of resist patterns
IN Hirano, Shuji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 98pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007114719	A	20070510	JP 2006-44437	20060221
PRAI JP 2005-272232	A	20050920		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007114719	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16;

2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03;
2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB41;
2H025/CC20

OS MARPAT 146:472192

GI

/ Structure 32 in file .gra /

AB The compns. contain (A) photoacid generators, (B) polymers showing increased soly. in alkalies under presence of acid, and (C) low mol. compds. I and/or II (Z = alkyl, OH, vinyl, alkoxy, halo, cyano, nitro, acyl, acyloxy, cycloalkyl, aryl, carboxyl, alkyloxycarbonyl, alkylcarbonyloxy, aralkyl; Zs may form arom. ring; Lc1 = groups for forming lactone rings with 2 arom. C atoms; Lc2 = groups having lactone structure; m = integer of 1-3; n = integer of 0-4; a = integer of 1-6; b = integer of 0-5). Further preferable specifications for I and II are also given. Formation of patterns with the compns. are also claimed. Patterns with small line edge roughness are formed.

ST benzolactone additive chem amplified pos photoresist; Ph lactone additive chem amplified pos photoresist

IT 935398-94-0P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(34chem. amplified pos.-working resist compns. contg. phenyl- or benzolactones for formation of fine patterns with small edge roughness)

IT 144089-15-6 144317-44-2 153698-46-5, Triphenyl sulfonium pentafluoro benzene sulfonate 197447-16-8 241806-75-7 258341-98-9 258872-05-8 270563-96-7 376357-89-0 389859-76-1 441296-92-0 935399-10-3 935399-11-4
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator; chem. amplified pos.-working resist compns. contg. phenyl- or benzolactones for formation of fine patterns with small edge roughness)

IT 99-89-8, 4-Isopropylphenol 1075-49-6, 4-Vinylbenzoic acid 5061-21-2, .alpha.-Bromo-.gamma.-butyrolactone
RL: RCT (Reactant); RACT (Reactant or reagent)
(additives from; chem. amplified pos.-working resist compns. contg. phenyl- or benzolactones for formation of fine patterns with small edge roughness)

IT 288620-13-3
RL: TEM (Technical or engineered material use); USES (Uses)
(base resin; chem. amplified pos.-working resist compns. contg. phenyl- or benzolactones for formation of fine patterns with small edge roughness)

IT 910916-97-1P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(chem. amplified pos.-working resist compns. contg. phenyl- or benzolactones for formation of fine patterns with small edge roughness)

IT 1774-34-1P, 4,4'-Bisphenol sulfoxide 7605-15-4P, Thioxanthen-9-one sulfoxide 27011-90-1P 935399-15-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(chem. amplified pos.-working resist compns. contg. phenyl- or benzolactones for formation of fine patterns with small edge roughness)

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IT   524699-60-3P   906553-07-9P   906553-08-0P   906553-11-5P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (chem. amplified pos.-working resist compns. contg. phenyl- or
        benzolactones for formation of fine patterns with small edge roughness)
IT   87-41-2, 1(3H)-Isobenzofuranone   3453-64-3   3883-64-5   4741-62-2
     4889-69-4   5398-11-8   7468-76-0   17475-41-1   19477-73-7   20643-66-7
     21615-74-7   31145-61-6   31145-62-7   31145-63-8   31145-64-9
     55104-32-0   56926-32-0   64169-34-2   65399-18-0   72424-08-9
     89877-62-3   91143-06-5   97522-01-5   241491-71-4   444068-96-6
     853880-96-3   910917-18-9   935398-95-1   935398-96-2   935398-97-3
     935398-98-4   935398-99-5   935399-00-1   935399-01-2   935399-02-3
     935399-03-4   935399-04-5   935399-05-6   935399-06-7   935399-07-8
     935399-08-9
     RL: MOA (Modifier or additive use); USES (Uses)
        (chem. amplified pos.-working resist compns. contg. phenyl- or
        benzolactones for formation of fine patterns with small edge roughness)
IT   99-90-1   147-93-3, Thiosalicylic acid   375-73-5,
     Nonafluorobutanesulfonic acid   492-22-8, Thioxanthen-9-one   2664-63-3,
     4,4'-Thiodiphenol   25601-74-5, 3,5-Bis(trifluoromethyl)benzenesulfonic
     acid
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (chem. amplified pos.-working resist compns. contg. phenyl- or
        benzolactones for formation of fine patterns with small edge roughness)
IT   247150-86-3   812692-94-7   906553-29-5   ***906553-31-9***
     906553-33-1   906553-51-3   906553-53-5   906553-55-7   ***906553-61-5***
     906553-63-7   ***906553-67-1***   906553-80-8   910917-70-3
       ***910917-72-5***   910917-73-6   910917-75-8   910917-78-1
     910917-80-5   910917-83-8   910917-85-0   910917-92-9   910917-94-1
     910918-00-2   910918-03-5   ***910918-04-6***   910918-06-8
     910918-07-9   910918-09-1   910918-10-4   910918-12-6   ***910918-13-7***
***
  ***   910918-16-0   910918-18-2   910918-19-3   935399-12-5   935399-13-6***
  ***   935399-14-7***
  ***   RL: TEM (Technical or engineered material use); USES (Uses)***
  ***      (chem. amplified pos.-working resist compns. contg. phenyl- or***
  ***      benzolactones for formation of fine patterns with small edge
roughness)***
  ***IT   7722-84-1, Hydrogen peroxide, reactions***
  ***   RL: RGT (Reagent); RACT (Reactant or reagent)***
  ***      (oxidizing agent; chem. amplified pos.-working resist compns.
contg.***
  ***      phenyl- or benzolactones for formation of fine patterns with small
edge***
  ***      roughness)***
  ***   ***
L14  ANSWER 47 OF 116  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:502254  CAPLUS <<LOGINID::20080627>>
DN   146:490422
ED   Entered STN:  09 May 2007
TI   Positive resist composition with resin, photoacid and solvent for
     microlithographic pattern formation method
IN   Iwato, Kaoru; Kodama, Kunihiko
PA   Fujifilm Corporation, Japan
SO   Eur. Pat. Appl., 68pp.
     CODEN: EPXXDW
DT   Patent
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LA English
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1783550	A1	20070509	EP 2006-23246	20061108
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	US 20070105045	A1	20070510	US 2006-594085	20061108
	KR 2007049586	A	20070511	KR 2006-109864	20061108
	JP 2007156450	A	20070621	JP 2006-302766	20061108
PRAI	JP 2005-323470	A	20051108		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1783550	IPCI	G03F0007-039 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	G03F007/039C1S; G03F007/039C; G03F007/039C1
US 20070105045	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
	ECLA	G03F007/039C1S; G03F007/039C; G03F007/039C1
KR 2007049586	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]
JP 2007156450	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0220-26 [I,A]; C08F0220-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-26 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB03; 2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BF02; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CC03; 2H025/CC20; 2H025/FA03; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/BA03Q; 4J100/BA11P; 4J100/BA11Q; 4J100/BA16Q; 4J100/BA40P; 4J100/BC04P; 4J100/BC04Q; 4J100/BC08P; 4J100/BC09Q; 4J100/BC53P; 4J100/BC53Q; 4J100/CA05; 4J100/DA01; 4J100/DA04; 4J100/JA38

AB Prepn. of a pos. resist compn. comprising a resin that contains a repeating unit having a lactone structure and a cyano group which increases its soly. to an alkali developer by action of an acid. for microlithog. pattern formation. Prepn. of a resist compn. comprising a photoacid compd. that generates an acid by irradn. with actinic ray or radiation and a solvent.

ST pos resist resin photoacid microlithog pattern

IT Polysiloxanes, reactions
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(Troysol S 366, surfactant; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT Polysiloxanes, reactions
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or

engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(fluorine-contg., surfactant; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT Polysiloxanes, reactions
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polyoxyalkylene-, KP 341, surfactant; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT Polyoxyalkylenes, reactions
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polysiloxane-, KP 341, surfactant; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT Fluoropolymers, reactions
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polysiloxane-, surfactant; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT Positive photoresists
(pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT 102-71-6P, Triethanolamine, preparation 120-07-0P 355-74-8P 484-47-9P, 2,4,5-Triphenylimidazole 613-29-6P, n,n-Dibutylaniline 716-79-0P, 2-Phenylbenzimidazole 1116-76-3P, Trioctylamine 1672-63-5P, 4-Hydroxyantipyrine 5675-51-4P, 1,12-Dodecanediol 18608-94-1P 24544-04-5P, 2,6-Diisopropylaniline 101431-08-7P 211919-60-7P, Trismethoxymethoxyethylamine 308141-03-9P 935536-52-0P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT 935536-18-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT 209482-18-8P 284474-28-8P 460731-17-3P 474510-73-1P 608140-58-5P ***808752-25-2P*** 852572-15-7P ***862261-51-6P*** 863024-59-3P ***868610-05-3P*** 881192-07-0P 926668-17-9P 929197-00-2P 931398-57-1P 935536-20-2P 935536-22-4P 935536-24-6P 935536-25-7P 935536-27-9P 935536-28-0P 935536-30-4P 935536-31-5P 935536-32-6P 935536-34-8P 935536-35-9P 935536-36-0P 935536-37-1P 935536-38-2P 935536-39-3P 935536-40-6P 935536-42-8P 935536-43-9P 935536-44-0P 935536-46-2P 935536-47-3P 935536-48-4P 935536-50-8P 935536-51-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT 920-46-7 935536-17-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT 96-48-0P, .gamma.-Butyrolactone 97-64-3P, Ethyl lactate 108-32-7P,

Propylene carbonate 108-94-1P, Cyclohexanone, reactions 110-43-0P, 2-Heptanone 1320-67-8P, Propylene glycol monomethyl ether 84540-57-8P, Propylene glycol monomethyl ether acetate 98516-33-7P, Propylene glycol monomethyl ether propionate
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(solvent; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

IT 137462-24-9P, Megafac F 176 275364-62-0P, KH 20 (surfactant) 868612-04-8P, PolyFox PF 6320
RL: IMF (Industrial manufacture); RGT (Reagent); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(surfactant; pos. resist compn. with resin, photoacid and solvent for microlithog. pattern formation method)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; EP 1515186 A 2005 CAPLUS
(2) Fuji Photo Film Co Ltd; EP 1701214 A 2006 CAPLUS
(3) Mitsubishi Rayon Co Ltd; WO 2004067592 A 2004 CAPLUS
(4) Mitsubishi Rayon Co Ltd; JP 2005272807 A 2005 CAPLUS

L14 ANSWER 48 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:438554 CAPLUS <<LOGINID::20080627>>
DN 146:451571
ED Entered STN: 20 Apr 2007
TI Positive-working photosensitive composition and pattern forming method using the same
IN Nishiyama, Fumiyuki; Kodama, Kunihiko
PA Fujifilm Corporation, Japan
SO U.S. Pat. Appl. Publ., 78pp.
CODEN: USXXCO
DT Patent
LA English
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20070087288	A1	20070419	US 2006-581407	20061017
JP 2007108581	A	20070426	JP 2005-301731	20051017
PRAI JP 2005-301731	A	20051017		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070087288	INCL	430270100
	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
JP 2007108581	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0020-10 [I,A]; C08F0020-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0020-00 [I,C]; C08F0020-10 [I,A]; G03F0007-004 [I,C];

G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]

FTERM 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CC03; 2H025/FA12; 4J100/AJ02S; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL08S; 4J100/BA03Q; 4J100/BA03R; 4J100/BA11P; 4J100/BA11Q; 4J100/BA11R; 4J100/BA16S; 4J100/BC03P; 4J100/BC07P; 4J100/BC07Q; 4J100/BC07R; 4J100/BC09P; 4J100/BC09Q; 4J100/BC09R; 4J100/BC52P; 4J100/BC52Q; 4J100/BC52R; 4J100/BC52S; 4J100/BC53P; 4J100/BC53Q; 4J100/BC53R; 4J100/BC53S; 4J100/CA04; 4J100/CA05; 4J100/CA06; 4J100/JA38

OS MARPAT 146:451571

AB A pos.-working photosensitive compn. includes (A) a resin contg. repeating units having diamantane structures and capable of decompg. under action of an acid to increase soly. in an alkali developer, (B) a compd. capable of generating a specific org. acid upon irradn. with an actinic ray or radiation, and (C) a solvent.

ST pos working photoresist photosensitive compn pattern

IT Photoresists
(solvent, pos.-working photosensitive compn. contg.)

IT ***808752-25-2P*** 852572-07-7P 852572-09-9P 863024-59-3P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of resin for pos.-working photosensitive compn.)

IT 857284-60-7P 923985-86-8P 923985-90-4P 923986-04-3P 923986-07-6P 923986-10-1P 923986-13-4P 923986-16-7P 923986-18-9P 923986-20-3P 930779-42-3P 930779-43-4P 930779-44-5P 930779-45-6P 930779-46-7P 934537-40-3P 934537-41-4P 934537-42-5P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of resin for pos.-working photosensitive compn.)

IT 112-53-8, 1-Dodecanol 760-93-0, Methacrylic anhydride 2292-79-7 3744-08-9, Triphenylsulfonium iodide 30545-19-8 82727-16-0 588668-97-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of resin for pos.-working photosensitive compn.)

IT 30651-02-6P 39646-84-9P 82727-09-1P 849542-37-6P 928329-37-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of resin for pos.-working photosensitive compn.)

IT 96-48-0, .gamma.-Butyrolactone 97-64-3, Ethyl lactate 108-32-7, Propylene carbonate 108-94-1, Cyclohexanone, uses 142-82-5, Heptane, uses 1320-67-8, Propylene glycol methyl ether 84540-57-8, Propylene glycol methyl ether acetate
RL: TEM (Technical or engineered material use); USES (Uses)
(solvent, pos.-working photosensitive compn. contg.)

L14 ANSWER 49 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:408693 CAPLUS <<LOGINID::20080627>>

DN 146:411522

ED Entered STN: 13 Apr 2007

TI Chemically amplified positive photoresists achieving good profile, PEB temperature dependency, and exposure latitude

IN Iwato, Kaoru

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 60pp.

CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007093909	A	20070412	JP 2005-282113	20050928
PRAI JP 2005-282113		20050928		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007093909	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0024-00 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0024-00 [I,C]; C08F0024-00 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC03; 2H025/FA17; 4J100/AU28P; 4J100/BA05P; 4J100/BA11P; 4J100/BA53P; 4J100/BC02P; 4J100/BC03P; 4J100/BC04P; 4J100/BC08P; 4J100/BC09P; 4J100/BC23P; 4J100/BC26P; 4J100/BC43P; 4J100/CA01; 4J100/JA37

GI

/ Structure 33 in file .gra /

AB The title photoresists contain resins having repeating unit I (R1-R6 = H, substituent) and increasing alkali soly. upon acid action, radiation-sensitive acid generators, and solvents. Patterning of the photoresist layers is also claimed.

ST dioxolanone contg acid labile resin pos photoresist; argon fluoride excimer laser lithog pos photoresist; PEB temp dependency profile exposure latitude photoresist

IT Positive photoresists
(pos. photoresists contg. dioxolanone ring-contg. acid-labile resins for ArF excimer laser photolithog.)

IT 120976-85-4 144317-44-2 442906-47-0 ***862261-67-4*** 933778-05-3 933778-06-4 933778-08-6 933778-09-7
RL: CAT (Catalyst use); USES (Uses)
(photoacid generators; pos. photoresists contg. dioxolanone ring-contg. acid-labile resins for ArF excimer laser photolithog.)

IT 933777-90-3P 933777-92-5P 933777-94-7P 933777-96-9P 933777-97-0P 933777-99-2P 933778-01-9P 933778-03-1P 933778-04-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresists contg. dioxolanone ring-contg. acid-labile resins for ArF excimer laser photolithog.)

L14 ANSWER 50 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:408651 CAPLUS <<LOGINID::20080627>>

DN 146:431315
ED Entered STN: 13 Apr 2007
TI Positive photoresists composition and pattern formation using the same
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 68pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007093778	A	20070412	JP 2005-280470	20050927
PRAI JP 2005-280470		20050927		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007093778	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; C08F0020-18 [I,A]; C08F0020-00 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0020-00 [I,C]; C08F0020-18 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CB48; 2H025/CC03; 2H025/FA17; 4J100/AL08P; 4J100/BA32P; 4J100/BC04P; 4J100/BC09P; 4J100/BC65P; 4J100/CA01; 4J100/CA03; 4J100/JA37; 4J100/JA38

AB The title compn. contains an acid-sensitive alkali-solubilizable resin, a photoacid generator, and a solvent, wherein the resin contains -L1-(R1)(R2)(R3)N+ X-(R1-3 = C.gtoreq.1 substituent; L1 = 2-valent org. group). The compn. provides good characteristics on: exposure latitude; PEB temp. dependence; and pattern profile.

ST pos photoresist compn resin pattern

IT Photolithography
Positive photoresists
(pos. photoresists compn.)

IT 209482-18-8 425670-64-0 ***862261-51-6*** 934187-16-3
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator in pos. photoresists compn.)

IT 333-27-7, Trifluoromethanesulfonic acid methyl ester 934186-81-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(resin in pos. photoresists compn.)

IT 934186-83-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(resin in pos. photoresists compn.)

IT 364736-20-9P 934186-84-2P 934186-87-5P 934186-90-0P 934186-93-3P ***934186-96-6P*** ***934186-99-9P*** 934187-00-5P 934187-02-7P ***934187-06-1P*** 934187-09-4P 934187-11-8P ***934187-14-1P***
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in pos. photoresists compn.)

IT 96-48-0, .gamma.-Butyrolactone 97-64-3, Ethyl lactate 108-32-7,

Propylene carbonate 108-94-1, Cyclohexanone, uses 110-43-0, 2-Heptanone 1320-67-8, Propylene glycol monomethyl ether 84540-57-8, Propylene glycol monomethyl ether acetate 98516-33-7, Propylene glycol monomethyl ether propionate
RL: NUU (Other use, unclassified); USES (Uses)
(solvent in pos. photoresists compn.)

L14 ANSWER 51 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:327809 CAPLUS <<LOGINID::20080627>>
DN 146:347448
ED Entered STN: 22 Mar 2007
TI Positive DUV resist composition with decreased defect and excellent lithography property and its patterning
IN Kinoshita, Yohei; Atsuchi, Kota; Iwai, Takeshi; Muroi, Masaaki
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 55pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007071960	A	20070322	JP 2005-256294	20050905
PRAI JP 2005-256294		20050905		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007071960	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; G03F0007-004 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AB16; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CC20; 2H025/FA12

AB The pos. resist compn. contain (A) resinous components which become alkali-sol. with acids, have Mw 5000-20,000, and, in mol. wt. distribution by GPC, ratio of peak surface area in the low-mol.-wt. region (mol. wt. 100-10,000) 55-80% to the whole peak surface area and (B) photoacid generators. Preferably, A contains component units derived from (.alpha.-lower alkyl) acrylates (.alpha.lAA) in the main chains. Preferably, A contains .alpha.lAA having acid-dissociative dissoln.-suppressing groups (a1), .alpha.lAA having lactone-contg. single or polycyclic ring groups (a2), .alpha.lAA having polar group-contg. aliph. hydrocarbyl (a3), and/or .alpha.lAA having aliph. polycyclic groups which are not acid-dissociative (a4). Preferably, A is a copolymer of a1, a2, a3, and a4. Preferably, the pos. resist compn. further involves N-contg. org. compds. The pos. resist compn. is applied on a substrate to give a resist film, exposed to light, and developed to give resist patterns.
ST deep UV resist pos methacrylate polymer
IT Positive photoresists
(pos. DUV resist compn. with decreased defect and excellent lithog. property and its patterning)
IT Amines, uses
RL: MOA (Modifier or additive use); USES (Uses)

(pos. DUV resist compn. with decreased defect and excellent lithog. property and its patterning)

IT 144317-44-2, Triphenylsulfonium nonafluorobutane sulfonate 284474-28-8 ***850483-11-3***
RL: CAT (Catalyst use); USES (Uses)
(photoacid generators; pos. DUV resist compn. with decreased defect and excellent lithog. property and its patterning)

IT 351197-82-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. DUV resist compn. with decreased defect and excellent lithog. property and its patterning)

IT 102-71-6, Triethanolamine, uses
RL: MOA (Modifier or additive use); USES (Uses)
(pos. DUV resist compn. with decreased defect and excellent lithog. property and its patterning)

L14 ANSWER 52 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:326147 CAPLUS <<LOGINID::20080627>>
DN 148:249967
ED Entered STN: 22 Mar 2007
TI Beneficial photoacid generator for CA resist in EUVL
AU Watanabe, Takeo; Hada, Hideo; Fukushima, Yasuyuki; Shiotani, Hideaki; Kinoshita, Hiroo; Komano, Hiroshi
CS Laboratory of Advanced Science and Technology for Industry, University of Hyogo, 3-1-2 Kouto, Kamigoori-cho, Akou-gun, Hyogo, 678-1205, Japan
SO AIP Conference Proceedings (2007), 879(Pt. 2, Synchrotron Radiation Instrumentation, Part 2), 1470-1473
CODEN: APCPCS; ISSN: 0094-243X
PB American Institute of Physics
DT Journal
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
AB We succeeded in developing beneficial photoacid generator (PAG) based on onium salts for extreme UV lithog. resist. The CA resist employing this beneficial PAG has E0 sensitivity of 1.1 mJ/cm2. We confirmed that the distinctive acid prodn. reaction is occurred under EUV exposure in comparing under EB exposure. As results of the time dependent mass spectroscopy and the Fourier Transform IR Spectroscopy (FT-IR), it is confirmed that multiple acids are generated from cyclo(1,3-perfluoropropanedisulfone) imidate employed as an anion of PAG under EUV exposure.
ST beneficial photoacid generator CA resist EUV lithog
IT Photoresists
(CA; beneficial photoacid generator for CA resist in EUVL)
IT Lithography
(EUV; beneficial photoacid generator for CA resist in EUV lithog.)
IT IR spectra
(beneficial photoacid generator for CA resist in EUV lithog.)
IT Sulfonium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(beneficial photoacid generator for CA resist in EUV lithog.)
IT Onium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(beneficial photoacid generator for CA resist in EUVL)
IT Onium compounds

RL: TEM (Technical or engineered material use); USES (Uses)
(iodonium; beneficial photoacid generator for CA resist in EUV lithog.)
IT 175284-06-7, Hydroxystyrene-tert-butyl acrylate copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(beneficial photoacid generator for CA resist in EUV lithog.)
IT 144317-44-2, Triphenylsulfonium perfluorobutanesulfonate 194999-85-4
808752-25-2
RL: TEM (Technical or engineered material use); USES (Uses)
(beneficial photoacid generator for CA resist in EUV lithog.)
IT ***862261-69-6***
RL: TEM (Technical or engineered material use); USES (Uses)
(for heating air; beneficial photoacid generator for CA resist in EUV lithog.)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; Gaussian03 electron orbital calculation software, http://www.gaussian.com/home.htm
(2) Hada, H; J Photopolym Sci Technol 2005, V18, P475 CAPLUS
(3) Hada, H; Proc SPIE 2004, V5374, P686 CAPLUS
(4) Hamamoto, K; J Photopolym Sci Technol 2002, V15, P361 CAPLUS
(5) Hamamoto, K; Photopolym Sci Technol 2001, V14, P567 CAPLUS
(6) Hideo, H; Jpn J Appl Phys 2005, V44, P5824
(7) Ito, H; Digest of Tech Papers 1982 Symp VLSI Tech 1982, P86
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(9) Ito, H; Polym Eng Sci 1983, V23, P1012 CAPLUS
(10) Kinoshita, H; J Vac Sci & Technol 1989, VB7, P1648
(11) MaCord, M; Microlithography, Micromachining, and Microfabrication; Microlithography V1, P208
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(13) Watanabe, T; J Vac Sci & Technol 2000, VB18, P2905
(14) Watanabe, T; Jpn J Appl Phys 2004, V43, P3713 CAPLUS
(15) Watanabe, T; Jpn J Appl Phys 2005, V44, P5866 CAPLUS
(16) Watanabe, T; Jpn J Phys 2005, V44, P5556 CAPLUS
(17) Watanabe, T; Photopolym Sci Technol 2001, V14, P555 CAPLUS
(18) Watanabe, T; Proc SPIE 2000, V3997, P600
(19) Yueh, W; Proc SPIE 2004, V5376, P434

L14 ANSWER 53 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:323011 CAPLUS <<LOGINID::20080627>>
DN 146:347444
ED Entered STN: 22 Mar 2007
TI Positive resist composition and pattern forming method using the same
IN Yamamoto, Kei; Kanna, Shinichi
PA Fujifilm Corporation, Japan
SO Eur. Pat. Appl., 54pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1764649	A2	20070321	EP 2006-19676	20060920
	EP 1764649	A3	20071031		

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU

JP 2007086166	A	20070405	JP 2005-272074	20050920
US 20070065752	A1	20070322	US 2006-523551	20060920
KR 2007032929	A	20070323	KR 2006-91312	20060920

PRAI JP 2005-272074 A 20050920

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1764649	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C1; G03F007/039C1S; S03F
JP 2007086166	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C1; G03F007/039C1S; S03F
	FTERM	2H025/AA02; 2H025/AA04; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB41; 2H025/FA03; 2H025/FA17
US 20070065752	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
KR 2007032929	IPCI	G03F0007-039 [I,A]

OS MARPAT 146:347444

AB A pos. resist compn. comprising: at least one compd. selected from a compd. capable of generating an acid represented by the formula (Rc1SO2)(Rc2SO2)NH as defined herein upon irradn. with actinic rays or radiation and a compd. capable of generating an acid represented by the following formula (Rc1SO2)(Rc2SO2)(Rc3SO2)CH(Rc1-3 = alkyl group substituted by at least one fluorine atom, or aryl group substituted by at least one fluorine atom) upon irradn. with actinic rays or radiation; and a compd. capable of generating an acid represented by the formula as (Rc4)n1-A-{-C(Ra1)(Ra1)-}n2-(-O-)n3-{-C(Ra3)(Ra4)-}n4-SO3H(Ra1-4 = H, F, trifluoromethyl; n1 = 1, 2; n2 = integer 1-3; n3 = 0, 1; n4 = integer 1-3) defined herein upon irradn. with actinic rays or radiation.

ST pos resist compn photoacid generator

IT Acids, uses

RL: CAT (Catalyst use); USES (Uses)
(photosensitive precursor; pos. resist compn. and pattern forming method using the same)

IT Positive photoresists
(pos. resist compn. and pattern forming method using the same)

IT 393110-05-9 460731-17-3 460731-18-4 541547-03-9 ***808752-25-2*** 852245-69-3 852245-71-7 ***862261-67-4*** 863024-59-3 ***877870-16-1*** 902096-34-8 913976-47-3 926924-99-4 929625-69-4 929625-70-7 929625-71-8 929625-72-9 929625-74-1 929625-76-3

RL: CAT (Catalyst use); USES (Uses)
(photoacid generator in pos. resist compn.)

L14 ANSWER 54 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:283576 CAPLUS <<LOGINID::20080627>>
DN 146:305062
ED Entered STN: 16 Mar 2007
TI Chemically amplified photoresists containing arylsulfonium salt photoacid generators and pattern formation using them
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 85pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 25

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007065353	A	20070315	JP 2005-252017	20050831
PRAI JP 2005-252017		20050831		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007065353	IPCI	G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; G03F0007-038 [N,A]; G03F0007-039 [N,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [N,C]; G03F0007-038 [N,A]; G03F0007-039 [N,C]; G03F0007-039 [N,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AB17; 2H025/AC06; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB29; 2H025/CC20; 2H025/FA12

OS MARPAT 146:305062
AB The photoresists contain [[p-R'(OCH2CH2)kO]mAr]nS+R3-nX- (Ar = arom. ring; R = monovalent org. group; R may form ring; R' = monovalent org. group; X- = anion; k = 0-5; m = 1, 2; n = 1-3). The photoresists show good sensitivity to extreme-UV and high soly. contrast after exposure to extreme-UV, and produce patterns with good profile and low line edge roughness.
ST arylsulfonium salt photoacid generator extreme UV photoresist
IT Photoresists
(UV, extreme-UV; arylsulfonium salts as photoacid generators for extreme-UV photoresists)
IT Catalysts
(photochem.; arylsulfonium salts as photoacid generators for extreme-UV photoresists)
IT 928049-40-5 928049-42-7 928049-44-9 928049-45-0 928049-47-2
928049-49-4 928049-51-8 928049-53-0 928049-55-2
928049-56-3 928049-58-5
RL: CAT (Catalyst use); USES (Uses)
(arylsulfonium salts as photoacid generators for extreme-UV photoresists)
IT 928049-38-1P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(manuf. of arylsulfonium salts as photoacid generators for extreme-UV photoresists)

IT 578-57-4, 2-Bromoanisole 107775-84-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(manuf. of arylsulfonium salts as photoacid generators for extreme-UV photoresists)

L14 ANSWER 55 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:283563 CAPLUS <<LOGINID::20080627>>
DN 146:305061
ED Entered STN: 16 Mar 2007
TI Positive photoresist compositions containing prescribed tertiary amines and their patterning
IN Sugimoto, Naoya
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007065337	A	20070315	JP 2005-251710	20050831
PRAI JP 2005-251710		20050831		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007065337	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CC20; 2H025/FA12

OS MARPAT 146:305061
AB The title compns. contain (A) resins increasing soly. in alkali developers upon acid action, (B) radiation-sensitive acid generators, and (C) tertiary amines R1R2NXCN (X = bivalent aliph. group; R1 = monovalent aliph. group; R2 = arom. group). The resists are useful for photofabrication processes using .ltoreq.220-nm far-UV or electron beam aligners.
ST pos photoresist tertiary amine contg precision photofabrication; cyanoalkyl substituted tertiary amine pos photoresist
IT Positive photoresists
(pos. photoresists contg. cyano-substituted tertiary amines and forming patterns with improved line-edge roughness and profile)
IT Amines, uses
RL: MOA (Modifier or additive use); USES (Uses)
(tertiary; pos. photoresists contg. cyano-substituted tertiary amines and forming patterns with improved line-edge roughness and profile)
IT 209482-18-8 284474-28-8 425670-64-0 541547-03-9 690258-44-7
808752-25-2 852572-15-7 863024-59-3 879180-00-4
902096-34-8 928217-81-6
RL: CAT (Catalyst use); USES (Uses)
(photoacid generators; pos. photoresists contg. cyano-substituted tertiary amines and forming patterns with improved line-edge roughness and profile)

IT 258879-87-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresists contg. cyano-substituted tertiary amines and forming patterns with improved line-edge roughness and profile)
IT 92-64-8 94-34-8 148-87-8 22031-33-0 91349-96-1 93839-02-2
928217-83-8 928217-84-9 928217-85-0 928217-86-1 928217-87-2
928217-88-3
RL: MOA (Modifier or additive use); USES (Uses)
(pos. photoresists contg. cyano-substituted tertiary amines and forming patterns with improved line-edge roughness and profile)
IT 258879-89-9 340964-38-7 398140-45-9 482609-97-2 508210-04-6
610300-93-1 811440-74-1 881659-13-8 903905-33-9 910606-41-6
911849-54-2 917868-55-4 928217-77-0 928217-79-2 928260-25-7
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresists contg. cyano-substituted tertiary amines and forming patterns with improved line-edge roughness and profile)

L14 ANSWER 56 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:192927 CAPLUS <<LOGINID::20080627>>
DN 146:283884
ED Entered STN: 22 Feb 2007
TI Positive resist composition for immersion exposure and pattern-forming method using the same
IN Inabe, Haruki; Kanda, Hiromi; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 51pp.
CODEN: USXXCO
DT Patent
LA English
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070042290	A1	20070222	US 2006-503958	20060815
	JP 2007052346	A	20070301	JP 2005-238734	20050819
	EP 1764647	A2	20070321	EP 2006-17164	20060817
	EP 1764647	A3	20070718		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	KR 2007021974	A	20070223	KR 2006-78391	20060818
PRAI	JP 2005-238734	A	20050819		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20070042290	INCL	430270100
	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
JP 2007052346	IPCI	G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]; G03F0007-039 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C];

H01L0021-027 [I,A]

FTERM 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB41; 2H025/CC20; 2H025/FA03; 2H025/FA17

EP 1764647 IPCI G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-029 [I,A]

IPCR G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-029 [I,C]; G03F0007-029 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]

ECLA G03F007/004D; S03F; S03F; S03F

KR 20070021974 IPCI G03F0007-039 [I,A]; G03F0007-004 [I,A]

AB A pos. resist compn. for immersion exposure comprises: (A) a resin capable of increasing its soly. in an alkali developer by an action of an acid, and (B) a compd. capable of generating an acid upon irradn. with actinic ray or radiation, wherein the acid satisfies conditions of V.gtoreq.230 and V/S.ltoreq.0.93 taking van der Waals vol. of the acid as V (.ANG.3), and van der Waals surface area of the acid as S (.ANG.2).

ST pos resist compn exposure pattern photolithog immersion

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg.; pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Lithography
Photolithography
(immersion; pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Polysiloxanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyoxyalkylene-; pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Polyoxyalkylenes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-; pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-; pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Positive photoresists
(pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Polysiloxanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT Molar volume
Surface area
(van der Waals; pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT 195000-69-2P 210040-28-1P 258879-87-7P 258879-89-9P 391613-69-7P 398140-80-2P 436852-48-1P 482609-97-2P 524699-47-6P 577995-45-0P 610300-93-1P 726175-43-5P 848134-81-6P 848408-36-6P 848408-37-7P 848408-38-8P 848408-39-9P 848408-41-3P 848408-42-4P 848413-54-7P 863024-57-1P 863133-35-1P 863133-36-2P 882305-17-1P 926925-10-2P
RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM

(Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT 144089-15-6P 144317-44-2P ***808752-25-2P*** 926924-99-4P 926925-01-1P 926925-03-3P 926925-05-5P 926925-07-7P 926925-09-9P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. for immersion exposure and pattern-forming method using the same)

IT 96-48-0, .gamma.-Butyrolactone 97-64-3, Ethyl lactate 108-32-7, Propylene carbonate 108-94-1, Cyclohexanone, uses 110-43-0, 2-Heptanone 111-42-2, uses 120-92-3, Cyclopentanone 484-47-9, 2,4,5-Triphenylimidazole 583-60-8, 2-MethylCyclohexanone 613-29-6, Dibutylaniline 1320-67-8, Propylene glycol monomethyl ether 1672-63-5 2217-07-4, Dipropylaniline 24544-04-5, 2,6-Diisopropylaniline 24556-20-5 70384-51-9 84540-57-8, Propylene glycol monomethyl ether acetate 137462-24-9, Megafac F 176 169965-90-6 863402-96-4, PF 636 863402-97-5, PF 6520
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. for immersion exposure and pattern-forming method using the same)

L14 ANSWER 57 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:192421 CAPLUS <<LOGINID::20080627>>
DN 146:262065
ED Entered STN: 22 Feb 2007
TI Positive resist composition and a pattern forming method using the same
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 48pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1755000	A2	20070221	EP 2006-16530	20060808
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007052107	A	20070301	JP 2005-235801	20050816
	US 20070042291	A1	20070222	US 2006-504040	20060815
	KR 2007021066	A	20070222	KR 2006-77025	20060816
PRAI	JP 2005-235801	A	20050816		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1755000	IPCI	G03F0007-039 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	G03F007/039C1S
JP 2007052107	IPCI	G03F0007-039 [I,A]; C08F0212-14 [I,A]; C08F0212-00 [I,C*]; C08F0220-28 [I,A]; C08F0220-00 [I,C*]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0212-00

[I,C]; C08F0212-14 [I,A]; C08F0220-00 [I,C];
C08F0220-28 [I,A]; G03F0007-004 [I,C]; G03F0007-004
[I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
ECLA G03F007/039C1S; S03F
FTERM 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AB17;
2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00;
2H025/BE10; 2H025/CB14; 2H025/CB41; 2H025/CB45;
2H025/CC20; 4J100/AB07P; 4J100/AL08Q; 4J100/BA02P;
4J100/BA03P; 4J100/BA05P; 4J100/BA11Q; 4J100/BC04P;
4J100/BC43P; 4J100/BC53Q; 4J100/JA38
US 2007/0042291 IPCI G03C0001-00 [I,A]
IPCR G03C0001-00 [I,C]; G03C0001-00 [I,A]
NCL 430/270.100
KR 2007021066 IPCI H01L0021-027 [I,A]; H01L0021-02 [I,C*]

AB A pos. resist compn. comprises (A) a compd. capable of generating sulfonic acid, bis(alkylsulfonyl)amide, or tris(alkylsulfonyl)methine upon irradn. with actinic ray or radiation, and (B) a resin capable of increasing the soly. in an alkali developer by action of an acid having specific repeating units, and a pattern forming method using the same.

ST line edge roughness microelectronics lithog pos photoresist

IT Integrated circuits
(large-scale; pos. resist compn. and a pattern forming method using the same)

IT Critical dimension
(line-edge roughness; pos. resist compn. and a pattern forming method using the same)

IT Surface roughness
(line-edge; pos. resist compn. and a pattern forming method using the same)

IT Lithography
(micrelectronics; pos. resist compn. and a pattern forming method using the same)

IT Positive photoresists
Semiconductor device fabrication
(pos. resist compn. and a pattern forming method using the same)

IT 926319-35-9P
RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. and a pattern forming method using the same)

IT 484-47-9 613-29-6, N,N-Dibutylaniline 19600-49-8 24544-04-5, 2,6-Diisopropylaniline 138529-81-4 144089-15-6 153698-46-5 197447-16-8 258872-05-8 270563-93-4 335199-99-0 365971-71-7 389859-76-1 460731-18-4 569363-92-4 640724-17-0 749924-59-2 754191-59-8 ***808752-25-2*** ***862261-51-6***
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and a pattern forming method using the same)

L14 ANSWER 58 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:169928 CAPLUS <<LOGINID::20080627>>
DN 146:239309
ED Entered STN: 15 Feb 2007
TI Resist composition with improved exposure latitude and PEB temperature dependence, and method of forming pattern using the same
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 57pp.
CODEN: JKXXAF

DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007041146	A	20070215	JP 2005-223135	20050801
PRAI JP 2005-223135		20050801		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007041146	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA00; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC03; 2H025/CC20; 2H025/FA17

OS MARPAT 146:239309

AB Disclosed is a resist compn. comprising (a) a compd. generating an acid upon receiving active ray or radiation, (b) a resin capable of increasing its alkali soly. upon interaction with an acid, (c) a compd. represented by NR2R3-CR4R5-COO-R1 (R1 = C.gtoreq.1 substituent; and R2-5 = H, substituent), and (d) a solvent.

ST resist compn photoresist semiconductor device fabrication amine

IT Photoresists
Resists
Semiconductor device fabrication
(Resist compn. with improved exposure latitude and PEB temp. dependence)

IT 471257-33-7P 482609-97-2P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Resist compn. with improved exposure latitude and PEB temp. dependence)

IT 2644-21-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Resist compn. with improved exposure latitude and PEB temp. dependence)

IT 364736-23-2 468758-27-2 924281-65-2 924281-66-3 924281-67-4 924281-68-5
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(Resist compn. with improved exposure latitude and PEB temp. dependence)

IT 109-89-7, Diethylamine, reactions 40258-78-4, .alpha.-Bromoethyl acetate
RL: RCT (Reactant); RACT (Reactant or reagent)
(Resist compn. with improved exposure latitude and PEB temp. dependence)

IT 120-07-0 613-29-6, N,N-Dibutylaniline 5412-66-8 5515-83-3 53342-22-6 194083-99-3 924281-69-6 924281-70-9 924281-71-0 924281-72-1

RL: TEM (Technical or engineered material use); USES (Uses)
(Resist compn. with improved exposure latitude and PEB temp. dependence)

IT 144317-44-2 209482-18-8 ***808752-25-2*** 924281-74-3
RL: CAT (Catalyst use); USES (Uses)
(photoacid; Resist compn. with improved exposure latitude and PEB temp. dependence)

L14 ANSWER 59 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:116336 CAPLUS <<LOGINID::20080627>>
DN 146:193831
ED Entered STN: 02 Feb 2007
TI Positive-working resist composition containing lactone compound and pattern formation
IN Tsubaki, Hideaki; Iwato, Kaoru; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 62pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007025240	A	20070201	JP 2005-207102	20050715
PRAI JP 2005-207102		20050715		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007025240	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17

OS MARPAT 146:193831
GI

/ Structure 34 in file .gra /

AB The compn. contains (A) a compd. generating acid by actinic ray or radiation, (B) a resin decomposable by acid and increases its soly. to alk. developer, and (C) a low mol. wt. lactone compd. I (L1 = org. group forming heterocycle with C atoms of lactone ring; R1-2 = H, org. group, OH). Pattern is formed by forming a resist film by the compn., exposing and developing the film. The compn. gives fine patters with improved line edge roughness, without developing defect, using ArF excimer laser beam.
ST pos resist acid generator lactone compd
IT Resists

(pos.-working; pos.-working resist compn. contg. acid generator, alkali-sol. resin, and lactone compd.)

IT 144317-44-2, Triphenylsulfonium perfluorobutanesulfonate 209482-18-8 301664-71-1 ***808752-25-2*** 867373-18-0
RL: CAT (Catalyst use); USES (Uses)
(acid generator; pos.-working resist compn. contg. acid generator, alkali-sol. resin, and lactone compd.)

IT 20513-98-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of)

IT 75-36-5, Acetyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of glucuronolactone)

IT 5206-40-6P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(pos.-working resist compn. contg. acid generator, alkali-sol. resin, and lactone compd.)

IT 258879-87-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working resist compn. contg. acid generator, alkali-sol. resin, and lactone compd.)

IT 20513-98-8 872208-79-2 872208-93-0 921762-06-3 921762-07-4 921762-08-5
RL: MOA (Modifier or additive use); USES (Uses)
(pos.-working resist compn. contg. acid generator, alkali-sol. resin, and lactone compd.)

IT 610300-96-4 881659-11-6 881659-13-8 903905-33-9 903905-40-8 910606-41-6 911849-54-2 921927-62-0
RL: TEM (Technical or engineered material use); USES (Uses)
(pos.-working resist compn. contg. acid generator, alkali-sol. resin, and lactone compd.)

L14 ANSWER 60 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1354917 CAPLUS <<LOGINID::20080627>>
DN 146:90250
ED Entered STN: 28 Dec 2006
TI Photosensitive composition, pattern forming method using the photosensitive composition and compound for use in the photosensitive composition
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 76pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1736825	A2	20061227	EP 2006-12669	20060620
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007003619	A	20070111	JP 2005-180980	20050621

KR 2006133922	A	20061227	KR 2006-55907	20060621
US 20070082289	A1	20070412	US 2006-471713	20060621

PRAI JP 2005-180980 A 20050621

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1736825	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	C07C309/80; C07C311/48; C07C381/12; G03F007/004D; G03F007/004F; G03F007/038C; G03F007/039C1; G03F007/039C1S
JP 2007003619	IPCI	G03F0007-004 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]
	ECLA	C07C309/80; C07C311/48; C07C381/12; G03F007/004D; G03F007/004F; G03F007/038C; G03F007/039C1; G03F007/039C1S
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB17; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17
KR 2006133922	IPCI	G03F0007-004 [I,A]
US 20070082289	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100

OS MARPAT 146:90250

AB A photosensitive compn. comprising a compd. capable of generating a compd. having a specific structure upon irradn. with actinic rays or radiation; a pattern forming method using the photosensitive compn.; a compd. having a specific structure; and a compd. capable of generating a compd. having a specific structure upon irradn. with actinic rays or radiation. The specific structure is: A-R-X-F (I) wherein X represents -CO- or SO2-; R represents a divalent linking group; and A represents an acidic group.

ST photosensitive compn pattern formation compd photoresist

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg., surfactant; photosensitive compn., pattern forming method and compd.)

IT Photoresists
(photosensitive compn., pattern forming method and compd.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyoxyalkylene-, surfactant; photosensitive compn., pattern forming method and compd.)

IT Fluoropolymers, uses
Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-, surfactant; photosensitive compn., pattern forming method and compd.)

IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactant; photosensitive compn., pattern forming method and compd.)

IT 284474-28-8 300374-81-6 474510-73-1 541547-03-9 ***808752-25-2*** 852572-15-7 867373-18-0 902096-34-8 917102-88-6

RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator; photosensitive compn., pattern forming method and compd.)

IT 421-85-2, Trifluoromethanesulfonamide 3353-89-7, Triphenylsulfonium bromide 82727-16-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(photosensitive compn., pattern forming method and compd.)

IT 917102-71-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photosensitive compn., pattern forming method and compd.)

IT 289623-64-9P 312620-54-5P 359635-35-1P 366808-82-4P 398140-43-7P 398140-45-9P 398140-69-7P 482609-97-2P 508210-04-6P 524699-47-6P 610300-92-0P 610300-93-1P 610300-94-2P 610300-96-4P 615278-35-8P 881659-08-1P 881659-11-6P 881659-13-8P 903905-33-9P 903905-40-8P 908124-74-3P 910606-41-6P 917102-68-2P 917102-70-6P 917102-72-8P 917111-11-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive compn., pattern forming method and compd.)

IT 3089-11-0 3957-22-0 4356-60-9 24979-69-9 24979-70-2 161679-94-3 162846-57-3 249743-11-1 321164-59-4 607357-61-9 862997-31-7 917102-75-1 917102-77-3 917102-79-5 917102-81-9 917102-83-1 917102-85-3 917102-86-4 917102-89-7 917102-90-0 917102-91-1
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive compn., pattern forming method and compd.)

IT 137462-24-9, Megafac F 176
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactant; photosensitive compn., pattern forming method and compd.)

L14 ANSWER 61 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1351698 CAPLUS <<LOGINID::20080627>>
DN 146:111227
ED Entered STN: 28 Dec 2006
TI Positive-working photoresist composition and method for pattern formation using the same
IN Wada, Kenji
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 76pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006350212	A	20061228	JP 2005-179335	20050620
PRAI	JP 2005-179335		20050620		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006350212	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]

FTERM 2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17

OS MARPAT 146:111227

AB The title compn. contains a photoacid generator generating an org. acid and an acid-sensitive alkali-solubilizable resin, wherein the acid generator contains a compd. having general structure HN(-SO2-Rf)2(Rf = F-contg. mono-valent org. group) and wherein the resin has a bicyclo[2.2.1]heptane structure and an acid-sensitive alkali-solubilizable ester group connected to the bicyclo structure. The compn. provides photoresist layer precursors improved on PEB temp. dependence and exposure latitude.

ST pos photoresist compn resin acid generator

IT Photolithography
Positive photoresists
(pos.-working photoresist compn. and method for pattern formation using the same)

IT 460731-18-4 460731-20-8 541547-03-9 569363-92-4 635715-30-9 640724-14-7 640724-17-0 ***808752-25-2*** ***862261-51-6*** ***862261-52-7*** ***862261-67-4*** ***868610-05-3*** 869739-65-1 880873-63-2 ***910606-27-8*** ***910606-28-9*** ***910606-29-0*** 910606-30-3 910606-31-4 910606-32-5 910606-33-6 910606-34-7 910606-35-8 910606-36-9 910606-44-9
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; pos.-working photoresist compn.)

IT 917814-73-4P 917814-76-7P 917814-77-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working photoresist compn.)

IT 917814-72-3P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin; pos.-working photoresist compn.)

L14 ANSWER 62 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1309172 CAPLUS <<LOGINID::20080627>>

DN 146:71859

ED Entered STN: 14 Dec 2006

TI Positive-working photoresist composition and method for pattern formation using the same

IN Takahashi, Omote

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 46pp.
CODEN: JKXXAF

DT Patent

LA Japanese

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006337507	A	20061214	JP 2005-159475	20050531
PRAI JP 2005-159475		20050531		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES

JP 2006337507	IPCI	G03F0007-039 [I,A]; C08F0020-28 [I,A]; C08F0020-00 [I,C*]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0020-00 [I,C]; C08F0020-28 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CC03; 2H025/CC20; 4J100/AL08P; 4J100/BA04P; 4J100/BA11P; 4J100/BC52P; 4J100/BC58P; 4J100/CA01; 4J100/CA03; 4J100/JA38

GI

/ Structure 35 in file .gra /

AB The title compn. contains a resin, a photoacid generator, and a solvent, wherein the resin has repeating unit I(Rc = single bond, 2-valent connecting group; Ra1-2 = H, alkyl,, acyl, etc.) and repeating units satisfying the equation: (total at. no.)/(carbon no.-oxygen no.).ltoreq.3. Compn. provides high resoln. patterns of good profile.

ST pos photoresist compn resin

IT Photolithography
Photoresists
(pos.-working photoresist compn. and method for pattern formation using the same)

IT 144089-15-6, Triphenylsulfonium perfluorooctylsulfonate 144317-44-2, Triphenylsulfonium perfluorobutanesulfonate 209482-18-8 284474-28-8 389859-76-1 425670-64-0 474510-73-1 680200-03-7 ***808752-25-2*** 852245-69-3 852572-09-9
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator in pos.-working photoresist compn.)

IT 911849-47-3P 916750-46-4P 916750-47-5P 916750-48-6P 916750-49-7P 916750-50-0P 916750-51-1P 916750-52-2P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in pos.-working photoresist compn.)

IT 108-94-1, Cyclohexanone, uses 84540-57-8, Propylene glycol monomethyl ether acetate
RL: NUU (Other use, unclassified); USES (Uses)
(solvent in pos.-working photoresist compn.)

L14 ANSWER 63 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1282686 CAPLUS <<LOGINID::20080627>>
DN 146:35895
ED Entered STN: 08 Dec 2006
TI Photoresist compositions with improved sensitivity and contrast in EUV exposure and method for forming precise patterns therewith
IN Wada, Kenji
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 82pp.
CODEN: JKXXAF
DT Patent

LA Japanese

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006330099	A	20061207	JP 2005-149989	20050523
PRAI	JP 2005-149989		20050523		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006330099	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB17; 2H025/CB41; 2H025/CB45; 2H025/CC20

OS MARPAT 146:35895

AB The disclosed photoresist compns. contain (A) R1X1NHX2R2 (R1, R2 = monovalent org. group; R1 and/or R2 = proton-accepting functional group; X1, X2 = CO, SO2) and (B) radiation-induced acid generators. Films from the compns. are exposed (e.g., to ArF excimer laser) and developed to give patterns.

ST sulfimide proton acceptor sulfonium photoacid generator photoresist; extreme UV photoresist pos neg sulfimide proton acceptor; electron beam resist proton acceptor sulfanilamide octanesulfonyl chloride adduct

IT Photoresists
(UV, extreme; photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT Silsesquioxanes
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylic, silicon-contg. pos. photoresist matrixes; photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT Electron beam resists
(neg.-working; photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT Negative photoresists
Positive photoresists
(photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT Electron beam resists
(pos.-working; photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT 258879-87-7 398140-43-7 482609-97-2 524699-47-6 610300-93-1 610300-94-2 615278-35-8 756877-86-8 881659-11-6 881659-13-8 902129-96-8
RL: TEM (Technical or engineered material use); USES (Uses)
(ArF pos. photoresist matrixes; photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT 24979-69-9 24979-70-2, VP 5000 321164-59-4
RL: TEM (Technical or engineered material use); USES (Uses)
(KrF neg. photoresist matrixes; photoresist compns. with improved sensitivity and contrast in EUV exposure)

IT 158593-28-3 177034-75-2 325143-38-2 610301-49-0 902096-39-3
RL: TEM (Technical or engineered material use); USES (Uses)
(KrF pos. photoresist matrixes; photoresist compns. with improved sensitivity and contrast in EUV exposure)
IT 63-74-1, Sulfanilamide 7795-95-1, 1-Octanesulfonyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of proton acceptors; photoresist compns. with improved sensitivity and contrast in EUV exposure)
IT 915104-83-5P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(proton acceptors; photoresist compns. with improved sensitivity and contrast in EUV exposure)
IT 5763-63-3 855752-87-3 916054-23-4 916054-24-5 916054-25-6
916054-26-7 916054-27-8 916054-28-9 916054-29-0 916054-30-3
916054-32-5 916054-34-7 916054-35-8 916054-36-9 916054-37-0
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(proton acceptors; photoresist compns. with improved sensitivity and contrast in EUV exposure)
IT 284474-28-8 425670-64-0 474510-73-1 541547-03-9 ***808752-25-2***
852245-71-7 852572-15-7 867373-18-0 902096-34-8
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(radiation-induced acid generators; photoresist compns. with improved sensitivity and contrast in EUV exposure)
IT 249743-11-1 607357-61-9 845795-93-9 848408-51-5 848408-52-6
RL: TEM (Technical or engineered material use); USES (Uses)
(silicon-contg. pos. photoresist matrixes; photoresist compns. with improved sensitivity and contrast in EUV exposure)

L14 ANSWER 64 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1229271 CAPLUS <<LOGINID::20080627>>
DN 146:16294
ED Entered STN: 24 Nov 2006
TI Resist composition and pattern-forming method using the same
IN Takahashi, Omote; Kawabe, Yasumasa
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006317794	A	20061124	JP 2005-141633	20050513
PRAI JP 2005-141633		20050513		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006317794	IPCI	G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04;

2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10;
2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB41;
2H025/CC20; 2H025/FA12; 2H025/FA17

OS MARPAT 146:16294

GI

/ Structure 36 in file .gra /

AB Disclosed is a resist compn. comprising (A) a resin increasing its soly. in an alkali developer upon the interaction with an acid, (B) a photoacid, (C) a compd. represented by I (R1 = arylene, alkylene, alkenylene, divalent alicyclic; and R2 = H, C1-14 alkyl), and (D) an org. solvent.

ST resist compn photoresist lithog photolithog amine compd

IT Photolithography
Photoresists
Resists
(photoresist compn.)

IT 97-64-3, Ethyl lactate 108-94-1, Cyclohexanone, uses 120-07-0, N-Phenyldiethanolamine 484-47-9, 2,4,5-Triphenylimidazole 524-38-9 1116-76-3, Trioctylamine 1122-58-3, 4-Dimethylaminopyridine 1320-67-8, Propylene glycol monomethyl ether 3001-72-7 4814-74-8 6066-82-6 7797-81-1 24544-04-5, 2,6-Diisopropylaniline 84540-57-8, Propylene glycol monomethyl ether acetate 88179-68-4 92619-32-4 144089-15-6 144317-44-2 209482-18-8 284474-28-8 389859-76-1 425670-64-0 474510-73-1 ***808752-25-2*** 852245-69-3 915379-04-3 915379-05-4 915379-06-5
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compn.)

L14 ANSWER 65 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1226563 CAPLUS <<LOGINID::20080627>>

DN 145:513852

ED Entered STN: 23 Nov 2006

TI Positive-working resist composition and method for resist pattern formation

IN Kinoshita, Yohei; Ohkubo, Waki; Nakagawa, Yusuke; Hidesaka, Shinichi; Irie, Makiko

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 53pp.
CODEN: PIXXD2

DT Patent

LA Japanese

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006123496	A1	20061123	WO 2006-JP308124	20060418

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,

SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

	JP 2006322989	A	20061130	JP 2005-143969	20050517
	EP 1882981	A1	20080130	EP 2006-732052	20060418
	R: DE				
	KR 2007118708	A	20071217	KR 2007-727126	20071121
PRAI	JP 2005-143969	A	20050517		
	WO 2006-JP308124	W	20060418		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006123496	IPCI	G03F0007-039 [I,A]; C08F0220-28 [I,A]; C08F0220-00 [I,C*]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-28 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	ECLA	G03F007/039C1S; G03F007/004D
JP 2006322989	IPCI	G03F0007-039 [I,A]; C08F0220-28 [I,A]; C08F0220-00 [I,C*]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-28 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/BA02P; 4J100/BA03R; 4J100/BC09P; 4J100/BC09R; 4J100/BC53Q; 4J100/CA05; 4J100/CA06; 4J100/JA38
EP 1882981	IPCI	G03F0007-039 [I,A]; C08F0220-28 [I,A]; C08F0220-00 [I,C*]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0220-00 [I,C]; C08F0220-28 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
KR 2007118708	IPCI	G03F0007-039 [I,A]

OS MARPAT 145:513852

GI

/ Structure 37 in file .gra /

AB This invention provides a pos.-working resist compn. contg. a resin component (A) and an acid generating agent component (B), which, upon a change in exposure, causes no significant variation in pattern size, and a method for resist pattern formation using this resist compn. Component (A) comprises a polymer comprising constitutional units contg. an

acetal-type protective group, acrylic ester-derived constitutional units contg. a lactone-contg. cyclic group, and acrylic ester-derived constitutional units contg. a polar group-contg. aliph. hydrocarbon group. Component (B) comprises an onium salt-type acid generating agent having a cation part I [R11 = alkyl, alkoxy, halo, hydroxy; R12, R13 = (un)substituted aryl or alkyl; n' = 1-3].

ST pos working resist sulfonium compd acid generating agent; acrylic polymer pos working resist

IT Sulfonium compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generating agent; pos.-working resist compns. and method for resist pattern formation)

IT Positive photoresists
(pos.-working resist compns. and method for resist pattern formation)

IT ***850483-11-3***
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generating agent; pos.-working resist compns. and method for resist pattern formation)

IT 79-41-4, Methacrylic acid, reactions 177609-29-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos.-working resist compns. and method for resist pattern formation)

IT 791611-93-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pos.-working resist compns. and method for resist pattern formation)

IT 872175-26-3P 915138-60-2P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working resist compns. and method for resist pattern formation)

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Daicel Chemical Industries Ltd; JP 2005220059 A 2005 CAPLUS
(2) Daicel Chemical Industries Ltd; JP 2005248153 A 2005 CAPLUS
(3) Daicel Chemical Industries Ltd; WO 200575446 A1 2005
(4) Fuji Photo Film Co Ltd; JP 2000181054 A 2000 CAPLUS
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(7) Jsr Corp; US 200472094 A1 2004
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(11) Korea Kumho Petrochemical Co Ltd; KR 20008811 A 2000
(12) Korea Kumho Petrochemical Co Ltd; TW 482754 B 2000 CAPLUS
(13) Korea Kumho Petrochemical Co Ltd; US 6111143 A 2000 CAPLUS
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(19) Mitsubishi Rayon Co Ltd; JP 2003212823 A 2003 CAPLUS
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(23) Nec Corp; US 5985522 A 1997 CAPLUS
(24) Nec Corp; US 5994025 A 1997 CAPLUS
(25) Rohm And Haas Electronic Materials L L C; WO 200219033 A2 2004
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(29) Shin-Etsu Chemical Co Ltd; EP 1378795 A1 2004 CAPLUS
(30) Shin-Etsu Chemical Co Ltd; US 200423153 A1 2004
(31) Shin-Etsu Chemical Co Ltd; JP 200445448 A 2004
(32) Sumitomo Chemical Co Ltd; JP 10-133375 A 1998 CAPLUS
(33) Tokyo Ohka Kogyo Co Ltd; JP 200537888 A 2005

L14 ANSWER 66 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1155062 CAPLUS <<LOGINID::20080627>>
DN 145:480445
ED Entered STN: 03 Nov 2006
TI Photoresist composition for immersion photolithography and method for pattern formation using the same
IN Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 42pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006301435	A	20061102	JP 2005-125418	20050422
PRAI JP 2005-125418		20050422		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006301435	IPCI	G03F0007-039 [I,A]; G03F0007-11 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-11 [I,C]; G03F0007-11 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA00; 2H025/AA03; 2H025/AA09; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB41; 2H025/CB45; 2H025/DA03; 2H025/FA17

AB The title compn. contains an alkali-solubilizable resin and a photoacid generator, wherein the resin has alicyclic groups in the main chain. The compn. provides pattens of good profile and high dry etching resistance.
ST photoresist compn immersion photolithog resin alicyclic
IT Photolithography
(immersion; photoresist compn. for immersion photolithog. and method for pattern formation using the same)
IT Photoresists
(photoresist compn. for immersion photolithog. and method for pattern formation using the same)
IT 19600-49-8 144317-44-2 ***808752-25-2*** 852572-15-7 913839-80-2 913839-81-3 913839-82-4
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; photoresist compn. for immersion photolithog. and method for pattern formation using the same)
IT 352712-40-4P 389132-40-5P 680615-32-1P 913839-83-5P 913839-84-6P 913839-85-7P 913839-86-8P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin; photoresist compn. for immersion photolithog. and method for pattern formation using the same)

L14 ANSWER 67 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1154998 CAPLUS <<LOGINID::20080627>>
DN 145:480444
ED Entered STN: 03 Nov 2006
TI Photoresist composition for immersion photolithography and method for pattern formation using the same
IN Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 45pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006301278	A	20061102	JP 2005-122622	20050420
PRAI JP 2005-122622		20050420		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006301278	IPCI	G03F0007-039 [I,A]; C08F0232-00 [I,A]; C08F0234-00 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; C08F0232-00 [I,C]; C08F0232-00 [I,A]; C08F0234-00 [I,C]; C08F0234-00 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA09; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/DA01; 2H025/FA03; 2H025/FA12; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AR11P; 4J100/AR11Q; 4J100/AR11R; 4J100/AR11S; 4J100/AR36P; 4J100/AR36Q; 4J100/AR36R; 4J100/BA03R; 4J100/BA16S; 4J100/BA20P; 4J100/BA20Q; 4J100/BA20R; 4J100/BC09P; 4J100/BC09Q; 4J100/BC09R; 4J100/BC53P; 4J100/BC53Q; 4J100/BC53R; 4J100/CA05; 4J100/CA06; 4J100/DA01; 4J100/DA28; 4J100/DA39; 4J100/JA38; 5F046/JA22

GI

/ Structure 38 in file .gra /

AB The title compn. contains an alkali-solubilizable resin and a photoacid generator, wherein the resin has repeating unit I-II(X, Y = methylene, ethylene, O, S; R1,4 = H, halo, alkyl, etc.; R2-3 = H, halo, alkyl, group contg. lactone ring, etc.; n = 0,1 ; R5 = alkyl, cycloalkyl, group contg. lactone ring). The compn. provides patterns of good profile and high dry etching-resistance.
ST photoresist compn immersion photolithog resin photoacid generator

IT Photolithography
(immersion; photoresist compn. for immersion photolithog. and method for pattern formation using the same)
IT Photoresists
(photoresist compn. for immersion photolithog. and method for pattern formation using the same)
IT 19600-49-8P 144317-44-2P ***808752-25-2P*** 852572-15-7P
913839-81-3P 913839-82-4P 913976-47-3P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoacid generator in photoresist compn.)
IT 913976-37-1P, N-Methylmaleimide-5-Norbornene-2-carboxylic acid 2-Methyl-2-adamantanol ester copolymer 913976-39-3P 913976-41-7P
913976-42-8P 913976-43-9P 913976-44-0P 913976-45-1P 913976-68-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in photoresist compn.)

L14 ANSWER 68 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1147409 CAPLUS <<LOGINID::20080627>>
DN 145:480437
ED Entered STN: 02 Nov 2006
TI Positive resist composition and method for forming resist pattern
IN Kinoshita, Yohei
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 64pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006115017	A1	20061102	WO 2006-JP307478	20060407
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006301288	A	20061102	JP 2005-122710	20050420
	KR 2007112480	A	20071126	KR 2007-723837	20071017
	CN 101198905	A	20080611	CN 2006-80019830	20071204
PRAI	JP 2005-122710	A	20050420		
	WO 2006-JP307478	W	20060407		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006115017	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]

	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
JP 2006301288	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AB16; 2H025/AB17; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CC20; 2H025/FA12
KR 2007112480	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
CN 101198905	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]

OS MARPAT 145:480437
GI

/ Structure 39 in file .gra /

AB Disclosed is a pos. resist compn. contg. a resin component (A) and an acid generator component (B) which generates an acid when exposed to light. The acid generator component (B) contains an acid generator (B1) represented by the following general formula I (R51 represents a straight chain, branched chain or cyclic alkyl group, or a straight chain, branched chain or cyclic fluorinated alkyl group; R52 represents a hydrogen atom, a hydroxyl group, a halogen atom, a straight chain, branched chain or cyclic alkyl group, a straight chain or branched chain halogenated alkyl group, or a straight chain or branched chain alkoxy group; R53 represents an optionally substituted aryl group; and n represents an integer of 1-3).
ST photoacid generator pos photoresist compn
IT Positive photoresists
(photoacid generators for)
IT 102-71-6, Triethanolamine, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generation type pos. photoresist compn. contg.)
IT 284474-28-8 797760-79-3 ***850483-11-3***
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator for pos. photoresist compns.)
IT 591743-63-4P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin for photoacid generation type pos. photoresist compns.)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fuji Photo Film Co Ltd; JP 2005266766 A 2005 CAPLUS
(2) Jsr Corp; JP 2003005372 A 2003 CAPLUS
(3) Jsr Corp; EP 1586570 A 2004 CAPLUS
(4) Jsr Corp; WO 2004065377 A1 2004 CAPLUS
(5) Jsr Corp; JP 2005041857 A 2004 CAPLUS

L14 ANSWER 69 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1065518 CAPLUS <<LOGINID::20080627>>
DN 145:386526
ED Entered STN: 13 Oct 2006
TI EUV positive photoresists showing superior high contrast and less outgas

generation and their patterning
IN Kawanishi, Yasuhiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 41pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006276760	A	20061012	JP 2005-99485	20050330
PRAI JP 2005-99485		20050330		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006276760	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AC03; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/FA12

OS MARPAT 145:386526
AB The photoresists contain (A) resins having repeating unit CH2CR1C6H4-n(OH)R2n (R1 = H, Me, CN, halo, perfluoro group; R2 = non-acidolytic group; n = 0-4) and CR3R4CR5(CO2X1) (R3-R5 = H, F, Cl, CN, alkyl; X1 = H, org. group) and increasing soly. in alk. developers upon acid action and (B) compds. generating S+RaRbRcX- (Ra-Rc = alkyl or aryl corresponding to alkanes or arenes having b.p. .gtoreq.160.degree. at 1 atm. pressure; X- = non-nucleophilic anion).
ST EUV pos photoresist hydroxyphenylsulfonium nonafluorobutanesulfonate photoacid generator; hydrolyzed acetoxystyrene polymer vinyl ether adduct photoresist; outgas prevention contrast EUV photoresist PEB performance
IT Photoresists
(UV; high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)
IT Positive photoresists
(high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)
IT Sulfonium compounds
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(photoacid generators; high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)
IT 18370-86-0DP, 2-Phenoxyethyl vinyl ether, reaction products with hydrolyzed acetoxystyrene-tert-Bu acrylate copolymer 174476-25-6DP, p-Acetoxystyrene-tert-butyl acrylate copolymer, hydrolyzed, reaction products with phenoxyethyl vinyl ether
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)
IT 375-73-5, Nonafluorobutanesulfonic acid 2664-63-3, 4,4'-Thiodiphenol
RL: RCT (Reactant); RACT (Reactant or reagent)

(high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)

IT 155040-27-0 159296-87-4 178889-54-8 186585-53-5 258871-96-4
301153-46-8 333758-18-2 345349-50-0 387382-49-2 552840-49-0
848352-68-1 848352-73-8 848352-74-9 848352-75-0 848352-79-4
848352-82-9 848352-84-1 848352-86-3 849348-32-9 849348-35-2
849348-43-2 849348-46-5 849348-51-2 866034-99-3 866035-00-9
866035-02-1 866035-03-2 866035-04-3 866035-05-4 866035-08-7
866035-09-8 866035-10-1 866035-12-3 866035-13-4 911036-06-1
911036-07-2 911036-09-4
RL: TEM (Technical or engineered material use); USES (Uses)
(high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)

IT 524699-60-3P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoacid generators; high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)

IT 247150-86-3 528593-34-2 910918-03-5 ***910918-04-6***
910918-07-9 910918-10-4 910918-12-6 910918-16-0 911036-10-7
911036-11-8 911036-12-9 911036-14-1 911036-16-3 911036-18-5
911036-20-9 911036-22-1 911036-24-3 911036-26-5 911036-28-7
911036-30-1
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(photoacid generators; high-contrast EUV pos. photoresists contg. prescribed sulfonium salts and generating less outgases)

L14 ANSWER 70 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1065387 CAPLUS <<LOGINID::20080627>>
DN 145:429410
ED Entered STN: 13 Oct 2006
TI Positive resist composition and patterning method
IN Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006276458	A	20061012	JP 2005-95523	20050329
PRAI JP 2005-95523		20050329		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006276458	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB43; 2H025/CB45; 2H025/FA03

AB Title compn. comprises (A) a resin component which contains alicyclic repeating units and naphthalene structure-contg. repeating units and has increased soly. in alkali development liq. and (B) actinic ray- or radiation-active acid generators.
ST pos resist alicyclic naphthalene polymer
IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and patterning method)
IT Resists
(pos.-working; pos. resist compn. and patterning method)
IT 912280-22-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. and patterning method)
IT 66003-78-9 144089-15-6 153698-46-5 197447-16-8 425670-64-0 474516-38-6 ***808752-25-2*** 852572-09-9
RL: MOA (Modifier or additive use); USES (Uses)
(pos. resist compn. and patterning method)
IT 912280-25-2 912280-28-5 912280-31-0 912280-33-2 912280-36-5 912280-38-7 912280-40-1 912280-42-3 912280-43-4 912280-44-5 912280-45-6 912280-47-8 912280-49-0 912280-51-4 912280-53-6
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and patterning method)

L14 ANSWER 71 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1065384 CAPLUS <<LOGINID::20080627>>
DN 145:429409
ED Entered STN: 13 Oct 2006
TI Photosensitive composition and patterning method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 74pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006276444	A	20061012	JP 2005-95325	20050329
PRAI JP 2005-95325		20050329		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006276444	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/FA12

AB Title compn. comprises resin components which contain structural repeating units contg. specific lactone structures and have increased soly. in alkali development liq. in the presence of of an acid and actinic ray- or radiation-active acid generators.
ST photoresist lactone functionality acrylic polymer

IT Resists
(chem. amplified resist compn. and patterning method)
IT 908020-71-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified resist compn. and patterning method)
IT 144089-15-6 144317-44-2 209482-18-8 258872-05-8 284474-28-8
425670-64-0 474510-73-1 541547-03-9 ***808752-25-2***
852245-69-3 852245-71-7 852572-09-9 867373-18-0
RL: MOA (Modifier or additive use); USES (Uses)
(chem. amplified resist compn. and patterning method)
IT 340964-38-7 827347-22-8 849023-21-8 881659-13-8 908020-80-4
911849-43-9 911849-44-0 911849-46-2 911849-47-3 911849-49-5
911849-50-8 911849-51-9 911849-53-1 911849-54-2 911849-55-3
911849-57-5 911849-58-6 911849-59-7 912269-74-0 912269-75-1
912269-76-2
RL: TEM (Technical or engineered material use); USES (Uses)
(chem. amplified resist compn. and patterning method)
IT 881659-12-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of chem. amplified resist compn.)
IT 32449-92-6, D-Glucurono-6,3-lactone
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of chem. amplified resist compn.)

L14 ANSWER 72 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1035384 CAPLUS <<LOGINID::20080627>>
DN 145:407587
ED Entered STN: 05 Oct 2006
TI Positive-working resist composition and pattern-forming method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 63pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006267637	A	20061005	JP 2005-86516	20050324
PRAI	JP 2005-86516		20050324		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006267637	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CC20; 2H025/FA17

OS MARPAT 145:407587

AB Disclosed is a pos.-working resist compn. comprising (a) a photoacid, (b) a resin with an alicyclic structure increasing its soly. in an alkali developer upon interaction with an acid, and (c) a N-contg. compd. R2NR1-CHH2CH2COO-R3 (R1-3 = alkyl, cycloalkyl; and n = integer 1-20).

ST pos working resist compn photoresist photolithog

IT Photolithography
Photoresists
Resists
(Pos.-working resist compn.)

IT 258879-87-7P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Pos.-working resist compn.)

IT 312620-52-3 482609-97-2 524699-47-6 610300-93-1 639477-63-7
849023-21-8 881659-11-6 881659-13-8 908124-74-3 909789-34-0
910044-89-2 910044-90-5 910134-49-5 911230-88-1
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(Pos.-working resist compn.)

IT 258872-05-8 284474-28-8 425670-64-0 ***808752-25-2***
852245-71-7 852572-15-7 911230-89-2 911230-90-5 911230-91-6
911230-92-7 911230-93-8 911235-88-6
RL: TEM (Technical or engineered material use); USES (Uses)
(Pos.-working resist compn.)

L14 ANSWER 73 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1010432 CAPLUS <<LOGINID::20080627>>
DN 145:386504
ED Entered STN: 29 Sep 2006
TI Positive photoresist composition and method for pattern formation using the same
IN Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 64pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006259508	A	20060928	JP 2005-79362	20050318
PRAI JP 2005-79362		20050318		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006259508	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE07; 2H025/BG00; 2H025/CB14; 2H025/CB17; 2H025/CB41; 2H025/CB42; 2H025/CB45; 2H025/FA17

GI

/ Structure 40 in file .gra /

AB The title compn. contains an acid-sensitive alkali-solubilizable resin and a radiation-sensitive compd. generating sulfonic acid, bis(alkylsulfonyl)amide, or tris(alkylsulfonyl)methine, wherein the rein has repeating unit I and [-CH2-C(Ra)(-LCOO-Rd)](Z = H, halo, CN, etc.; Al = acid-sensitive group; n = 0-4; Ra = H, Me, trifluoromethyl, etc.; L = 2-valent connecting group; Rd = acid-sensitive group). Compn. shows good sensitivity towards EUV and high soly. discrimination by the development.

ST pos photoresist compn resin

IT Photolithography
Positive photoresists
(pos. photoresist compn. and method for pattern formation using the same)

IT 13891-29-7 138529-81-4 197447-16-8
RL: CAT (Catalyst use); USES (Uses)
(acid or acid deriv. generator in pos. photoresist compn.)

IT 911027-47-9DP, hydrolyzed in acid 911027-48-0DP, hydrolyzed in acid
911027-51-5DP, hydrolyzed in acid 911027-54-8DP, hydrolyzed in acid
911027-57-1DP, hydrolyzed in acid 911027-60-6DP, hydrolyzed in acid
911027-63-9DP, hydrolyzed in acid 911027-64-0DP, hydrolyzed in acid
911027-65-1DP, hydrolyzed in acid 911027-67-3DP, hydrolyzed in acid
911027-69-5DP, hydrolyzed in acid 911027-70-8DP, hydrolyzed in acid
911027-73-1DP, hydrolyzed in acid 911027-76-4DP, hydrolyzed in acid
911027-77-5DP, hydrolyzed in acid 911027-80-0DP, hydrolyzed in acid
911027-83-3DP, hydrolyzed in acid 911027-86-6DP, hydrolyzed in acid
911027-88-8DP , hydrolyzed in acid 911027-89-9DP, hydrolyzed in acid
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresist compn. and method for pattern formation using the same)

L14 ANSWER 74 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1010147 CAPLUS <<LOGINID::20080627>>
DN 145:366508
ED Entered STN: 29 Sep 2006
TI Photoacid generation type photosensitive composition and pattern formation method
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006258925	A	20060928	JP 2005-73178	20050315
PRAI	JP 2005-73178		20050315		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006258925	IPCI	G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AB03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/AD05; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CA48; 2H025/CB42; 2H025/CC17

OS MARPAT 145:366508

AB The disclosed photosensitive compn. contains a photoacid generator which generates an acid of formula RSO2NHSO2R (R = F-contg. org. moiety) upon irradn. with actinic radiation and another photoacid generator which generates an acid of formula CF3(CF2)nSO3H (n = 5-7). The photolithog. pattern formation method which uses the photoacid generation type photoresists is also disclosed. The photoresists exhibit high sensitivity to EUV and give high resoln. patterns.

ST photoacid generator photoresist compn

IT Photoresists
(photoacid generation type; photoacid generator compns. for)

IT 144089-15-6 144116-10-9 177034-80-9 241806-76-8 258341-95-6
301664-72-2 343629-51-6 380886-84-0 383367-32-6 421555-74-0
425670-70-8 460731-18-4 460731-20-8 541547-03-9 569363-92-4
635715-30-9 640724-13-6 640724-14-7 640724-17-0 643030-18-6
808752-25-2 845795-97-3 ***862261-51-6***
862261-52-7 ***862261-67-4*** ***868610-05-3***
869739-65-1 880873-63-2 ***910606-27-8*** ***910606-28-9***
910606-29-0 910606-30-3 910606-31-4 910606-32-5
910606-33-6 910606-34-7 910606-35-8 910606-36-9 910606-37-0
910606-38-1 910606-39-2 910606-40-5 910606-44-9
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator for photoresist compns.)

IT 24979-69-9, Poly(3-hydroxystyrene) 24979-70-2, Poly(4-hydroxystyrene)
158593-28-3 177034-75-2 249743-11-1 258879-87-7 288620-13-3
289623-64-9 312620-54-5 321164-59-4, 4-Hydroxystyrene-1vinylnaphthalene copolymer 325143-38-2 340964-38-7 359635-35-1
398140-43-7 398140-45-9 398140-69-7 405509-21-9 508210-04-6
610300-92-0 610300-94-2 610301-49-0 615278-35-8 677351-20-1
845795-93-9 848408-51-5 848408-52-6 873546-13-5 881659-08-1
881659-11-6 881659-13-8 902129-96-8 903905-33-9 903905-40-8
908124-74-3 910606-41-6
RL: TEM (Technical or engineered material use); USES (Uses)
(resins for photoacid generation type photoresist compns.)

L14 ANSWER 75 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1005519 CAPLUS <<LOGINID::20080627>>
DN 145:386495
ED Entered STN: 28 Sep 2006
TI Positive resist composition and pattern forming method using the same
IN Hirano, Shuji; Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 66pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1705518	A2	20060927	EP 2006-5780	20060321
	EP 1705518	A3	20071107		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 20060216635	A1	20060928	US 2006-276990	20060320
	US 7374860	B2	20080520		
	KR 2006102515	A	20060927	KR 2006-26007	20060322
	JP 2006301609	A	20061102	JP 2006-79221	20060322
PRAI	JP 2005-81527	A	20050322		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1705518	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-004 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C; G03F007/039C1S
US 20060216635	IPCI	G03C0001-00 [I,A]; G03F0007-004 [I,A]; G03F0007-32 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C; G03F007/039C1S
KR 2006102515	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C; G03F007/039C1S
JP 2006301609	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB14; 2H025/CB17; 2H025/CB41; 2H025/CB45; 2H025/FA17

OS MARPAT 145:386495

AB The invention provides a pos. resist compn. for the pattern formation by the use of actinic rays or radiation, ensuring that the sensitivity, resoln. and pattern profile are good, the line edge roughness is small and the surface roughness is satisfied, and a pattern forming method using the compn., wherein the pos. resist compn. is a pos. resist compn. comprising (A) a compd. capable of generating an acid upon irradn. with actinic rays or radiation, and (B) a resin of which soly. in an alkali developer increases under the action of an acid, the resin comprising a specific repeating unit which is a substituted polystyrene deriv. having a lactone structure; and a pattern forming method using the compn.

ST pos resist compn pattern forming actinic ray radiation; line edge roughness polystyrene deriv lactone photoresist

IT Polysiloxanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(polyoxyalkylene-, surfactant; pos. resist compn. and pattern forming

method using the same)

IT Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(polysiloxane-, surfactant; pos. resist compn. and pattern forming method using the same)

IT Positive photoresists

(pos. resist compn. and pattern forming method using the same)

IT 906553-07-9P

RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(acid generator; pos. resist compn. and pattern forming method using the same)

IT 524699-60-3

RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)

(acid generator; pos. resist compn. and pattern forming method using the same)

IT 906553-08-0P 906553-11-5P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acid generator; pos. resist compn. and pattern forming method using the same)

IT 144089-15-6 144317-44-2 194999-85-4 197447-16-8 247150-86-3
258341-98-9 258872-05-8 270563-93-4 270563-96-7 365971-84-2
376357-89-0 389859-76-1 812692-94-7 906553-21-7 906553-27-3
906553-29-5 ***906553-31-9*** 906553-33-1 906553-35-3
906553-51-3 906553-53-5 906553-55-7 906553-59-1 906553-63-7
906553-67-1 906553-80-8 910917-70-3 ***910917-72-5***
910917-73-6 910917-75-8 910917-77-0 910917-78-1 910917-80-5
910917-81-6 910917-83-8 910917-85-0 910917-87-2 910917-89-4
910917-91-8 910917-92-9 910917-94-1 910917-96-3 910917-98-5
910918-00-2 910918-02-4 910918-03-5 ***910918-04-6***
910918-06-8 910918-07-9 910918-09-1 910918-10-4 910918-12-6
910918-13-7 910918-15-9 910918-16-0 910918-18-2
910918-19-3

RL: TEM (Technical or engineered material use); USES (Uses)

(acid generator; pos. resist compn. and pattern forming method using the same)

IT 99-90-1 108-88-3, Toluene, reactions 147-93-3, Thiosalicylic acid
375-73-5, Nonafluorobutanesulfonic acid 492-22-8, Thioxanthen-9-one
1075-49-6, 4-Vinylbenzoic acid 2664-63-3, 4,4'-Thiodiphenol 5061-21-2,
.alpha.-Bromo-.gamma.-butyrolactone 25601-74-5, 3,5-
Bistrifluoromethylbenzenesulfonic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(pos. resist compn. and pattern forming method using the same)

IT 27011-90-1P 910916-98-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(pos. resist compn. and pattern forming method using the same)

IT 910916-99-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. resist compn. and pattern forming method using the same)

IT 102-86-3, Tri-n-hexylamine 484-47-9 2052-49-5, Tetra(n-butyl)ammonium hydroxide 910917-00-9 910917-01-0 910917-03-2 910917-05-4
910917-07-6 910917-08-7 910917-09-8 910917-11-2 910917-13-4

910917-15-6 910917-16-7 910917-17-8 910917-19-0 910917-20-3
910917-22-5 910917-24-7 910917-26-9 910917-28-1 910917-30-5
910917-31-6 910917-33-8 910917-35-0 910917-36-1 910917-37-2
910917-38-3 910917-39-4 910917-40-7 910917-42-9 910917-43-0
910917-45-2 910917-47-4 910917-49-6 910917-51-0 910917-53-2
910917-55-4 910917-57-6 910917-58-7 910917-59-8 910917-60-1
910917-61-2 910917-63-4 910917-65-6 910917-67-8 910917-68-9
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and pattern forming method using the same)

IT 137462-24-9, Megafac F 176 216679-67-3, Megafac R 08
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactant; pos. resist compn. and pattern forming method using the same)

L14 ANSWER 76 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:981111 CAPLUS <<LOGINID::20080627>>
DN 145:366500
ED Entered STN: 22 Sep 2006
TI Positive-working photoresist compositions and method for their patterning
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 64pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006251672	A	20060921	JP 2005-71192	20050314
PRAI JP 2005-71192		20050314		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006251672	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB16; 2H025/CB41; 2H025/CC20; 2H025/FA17

OS MARPAT 145:366500
AB The compns. contain (A) acid generators, (B) polymers showing increase in alk. developer soly. by presence of acids, and (C) R2NR1CH2CH2CO2R3 (R1-R3 = (cyclo)alkyl with .gtoreq.1 of R1-R3 being C.gtoreq.5 alkyl and the other 2 may be forming a ring). Method for patterning the resists is also claimed. The compns. show improved post exposure delay in liq. immersion lithog.
ST pos working photoresist compn patterning; nitrogen compd post exposure delay prevention photoresist; acid generator alk developer pos working photoresist
IT Positive photoresists
(liq. immersion patterning of pos.-working photoresist compns. contg. aminopropanoic acid esters for improved post exposure delay)

IT 144089-15-6 197447-16-8 258872-05-8 284474-28-8 389859-76-1
425670-64-0 ***808752-25-2*** 852245-71-7 852572-15-7
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator; liq. immersion patterning of pos.-working photoresist compns. contg. aminopropanoic acid esters for improved post exposure delay)
IT 258879-87-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(liq. immersion patterning of pos.-working photoresist compns. contg. aminopropanoic acid esters for improved post exposure delay)
IT 108196-44-7 910044-80-3 910044-81-4 910044-82-5 910044-83-6
910044-84-7 910044-85-8 910044-86-9 910044-87-0 910044-88-1
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(liq. immersion patterning of pos.-working photoresist compns. contg. aminopropanoic acid esters for improved post exposure delay)
IT 158593-28-3 249743-11-1 312620-52-3 325143-38-2 372968-15-5
482609-97-2 524699-47-6 607357-61-9 610300-93-1 639477-63-7
848408-51-5 848408-52-6 849023-21-8 862261-72-1 870466-39-0
881659-11-6 881659-13-8 908124-74-3 909789-34-0 910044-89-2
910044-90-5 910134-49-5
RL: TEM (Technical or engineered material use); USES (Uses)
(liq. immersion patterning of pos.-working photoresist compns. contg. aminopropanoic acid esters for improved post exposure delay)

L14 ANSWER 77 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:981071 CAPLUS <<LOGINID::20080627>>
DN 145:366498
ED Entered STN: 22 Sep 2006
TI Positive-working electron beam- and photo-resist resin composition and method for pattern formation
IN Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006251551	A	20060921	JP 2005-69871	20050311
PRAI JP 2005-69871		20050311		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006251551	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE07; 2H025/BE10;

2H025/BG00; 2H025/CB14; 2H025/CB16; 2H025/CB17;
2H025/CB41; 2H025/CB45; 2H025/CB55; 2H025/CB56;
2H025/FA10; 2H025/FA17

GI

/ Structure 41 in file .gra /

AB The title compn. contains an acid-sensitive alkali-solubilizable resin and an acid generator, wherein the acid generator generates sulfonic acid, bis(alkylsulfonyl)amide, or tris(alkylsulfonyl)methine and wherein the resin has .ltoreq.5 area % of oligomers having <1,000 mol. wt. and .ltoreq.10 area % of polymer having .gtoreq.15,000 mol. wt. by GPC anal. and consists of repeating unit [-CH2-C(R1)(L-COO-X)], I, and II(R1 = H, Me, trifluoromethyl, etc.; Z = halo, cyano, nitro, etc.; A1 = acid-insensitive alkyl, alkoxy, alkylcarbonyl, etc.; m,n = 0-4; L = single bond, 2-valent connecting group; X = acid-sensitive group). The compn. shows high sensitivity and high soly. discrimination and provides patterns of good profile.

ST pos electron beam resist compn polymer acid generator

IT Electron beam lithography
Electron beam resists
Photolithography
Photoresists
(pos.-working electron beam- and photo-resist resin compn. and method for pattern formation)

IT 1886-74-4P 144089-15-6P 144317-44-2P 153698-46-5P 171417-92-8P
197447-16-8P 227199-92-0P 258872-05-8P 270563-93-4P 270563-96-7P
389859-76-1P 391232-40-9P 454471-05-7P 471283-62-2P 471283-64-4P
721927-05-5P 848352-94-3P ***862261-51-6P***
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid generator; pos.-working electron beam- and photo-resist resin compn.)

IT 155040-27-0P 159296-87-4P 301153-46-8P 488820-69-5P 552840-49-0P
863224-11-7P 910132-19-3P 910132-20-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resins; pos.-working electron beam- and photo-resist resin compn.)

L14 ANSWER 78 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:974439 CAPLUS <<LOGINID::20080627>>
DN 145:345345
ED Entered STN: 21 Sep 2006
TI Trimethine compounds having disulfonylimide anions, and optical recording media using the compounds
IN Kosaka, Akihiro; Kato, Kenichi; Sasaki, Hiroyuki; Masaoka, Toshihiro; Terao, Hiroshi; Kumagaya, Yojiro; Nishimoto, Taizo; Takahashi, Eiichi; Murayama, Shunsuke; Aso, Yoshiaki; Ogiso, Akira
PA Mitsui Chemicals Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 67pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 28, 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006248180	A	20060921	JP 2005-71680	20050314
PRAI	JP 2005-71680		20050314		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006248180	IPCI	B41M0005-26 [I,A]; G11B0007-244 [I,A]; G11B0007-24 [I,C*]
	IPCR	B41M0005-26 [I,C]; B41M0005-26 [I,A]; G11B0007-24 [I,C]; G11B0007-244 [I,A]
	FTERM	2H111/EA03; 2H111/EA22; 2H111/EA32; 2H111/EA39; 2H111/FA01; 2H111/FA12; 2H111/FB42; 5D029/JA04; 5D029/JB21

OS MARPAT 145:345345

GI

/ Structure 42 in file .gra /

AB The trimethine compds. have anion components XSO2N-SO2Y (X, Y = alkyl, alkenyl, aryl, metallocenyl, heterocyclic ring I, X and Y may link together to form a ring; A = heterocyclic ring contg. N and carbonyl connected to A). The optical recording media are capable of recording and readout by short wavelength laser at 520-690 nm, and show good heat moisture resistance.

ST trimethine dye optical recording media; optical disk trimethine dye sulfonyl imide anion

IT Optical disks
Optical memory devices
(trimethine compds. having disulfonylimide anions for optical recording media)

IT Cyanine dyes
(trimethine dyes; trimethine compds. having disulfonylimide anions for optical recording media)

IT 74276-27-0P 189189-12-6P 402587-65-9P 909274-84-6P 909274-90-4P 909274-91-5P 909274-94-8P 909274-96-0P 909275-01-0P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of trimethine compds. having disulfonylimide anions for optical recording media)

IT 622-15-1, N,N'-Diphenylformamidine 36429-14-8 82113-65-3, Bis(trifluoromethylsulfonyl)imide 84246-29-7 123088-61-9 315192-59-7 344928-74-1 889103-00-8 909274-82-4 909274-88-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of trimethine compds. having disulfonylimide anions for optical recording media)

IT 909274-85-7P 909274-86-8P ***909274-87-9P*** 909274-92-6P 909274-93-7P 909274-97-1P 909274-98-2P ***909274-99-3P*** 909275-00-9P 909275-02-1P ***909275-03-2P***
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(trimethine dye; prepn. of trimethine compds. having disulfonylimide anions for optical recording media)

IT 909275-04-3 909275-06-5 909275-07-6 909275-08-7 909275-10-1
909275-11-2 909275-13-4 909275-16-7 909275-18-9
909275-20-3 909565-12-4
RL: TEM (Technical or engineered material use); USES (Uses)
(trimethine dye; trimethine compds. having disulfonylimide anions for optical recording media)

L14 ANSWER 79 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:972517 CAPLUS <<LOGINID::20080627>>
DN 145:366480
ED Entered STN: 20 Sep 2006
TI Photosensitive composition and pattern-forming method using the same
IN Mizutani, Kazuyoshi; Kawanishi, Yasutomo
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 71pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1703326	A2	20060920	EP 2006-5324	20060315
	EP 1703326	A3	20071107		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006259136	A	20060928	JP 2005-75494	20050316
	US 20060210919	A1	20060921	US 2006-373188	20060313
PRAI	JP 2005-75494	A	20050316		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1703326	IPCI	G03F0007-038 [I,A]; G03F0007-039 [I,A]; G03F0007-004 [I,A]; G03F0007-075 [I,A]; G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-004 [I,A]; G03F0007-075 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-075 [I,C]; G03F0007-075 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/038C; G03F007/039C; G03F007/039C1; G03F007/039C1S; G03F007/075M2
JP 2006259136	IPCI	G03F0007-004 [I,A]; G03F0007-038 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AB03; 2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CC17
US 20060210919	IPCI	G03C0001-76 [I,A]
	IPCR	G03C0001-76 [I,C]; G03C0001-76 [I,A]
	NCL	430/270.100

ECLA G03F007/004D; G03F007/004F; G03F007/038C; G03F007/039C; G03F007/039C1; G03F007/039C1S; G03F007/075M2

OS MARPAT 145:366480

GI

/ Structure 43 in file .gra /

AB A photosensitive compn. comprises (A) a specific photoacid generator (PAG), which is excellent in sensitivity, resoln., and defocus latitude (DOF), and a pattern-forming method using the photosensitive compn. is provided. Compound (A) is represented by I (Ar1, Ar2 and Ar3 = an arom. ring having from 6 to 20 carbon atoms, and at least one of Ar1 to Ar3 has a -Q-SO2Ra group or a -Q-CORb group as a substituent; Ra and Rb = an alkyl group or an aryl group; Q = oxygen atom or -N(Ry)-; Ry = hydrogen atom, an alkyl group, or a cycloalkyl group; X = a single bond or a divalent linking group; and Y = a sulfonate anion, a carboxylate anion, a bis(alkylsulfonyl)- amide anion, or a tris(alkylsulfonyl) methide anion).

ST photosensitive compn pattern photoresist photoacid generator lithog printing

IT Lithography
Photoresists
(photosensitive compn. for pattern-forming method)

IT 910130-11-9 910130-12-0 910130-13-1 910130-14-2 910130-16-4
910130-17-5 910130-18-6 910130-20-0 910130-21-1 910130-22-2
910130-23-3 910130-25-5 910130-27-7 910130-28-8 910130-30-2
910130-31-3 910130-32-4 910130-34-6 910130-35-7 910130-37-9
910130-38-0 ***910130-39-1***
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; photosensitive compn. for pattern-forming method contg.)

IT 24979-69-9 185405-14-5 321164-59-4 345212-27-3
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(photosensitive compn. for pattern-forming method contg.)

IT 250378-10-0P 258879-89-9P 289623-64-9P 359635-35-1P 366808-82-4P
391232-36-3P 398140-43-7P 482609-97-2P 524699-47-6P 610300-92-0P
610300-93-1P 610300-94-2P 610300-95-3P 610300-96-4P 615278-35-8P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin; photosensitive compn. for pattern-forming method contg.)

IT 129674-22-2 158593-28-3 177034-75-2 200808-68-0 249743-11-1
288620-13-3 325143-37-1 325143-38-2 372968-15-5 607357-61-9
610301-49-0 845795-93-9 848408-51-5 848408-52-6 862261-72-1
862997-57-7 910130-40-4
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(resin; photosensitive compn. for pattern-forming method contg.)

L14 ANSWER 80 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:972498 CAPLUS <<LOGINID::20080627>>

DN 145:366479

ED Entered STN: 20 Sep 2006

TI Positive resist composition and pattern forming method using the resist composition

IN Nishiyama, Fumiyuki

PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 76pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1703322	A2	20060920	EP 2006-5356	20060316
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006259277	A	20060928	JP 2005-77103	20050317
	US 20060210922	A1	20060921	US 2006-377728	20060317
PRAI	JP 2005-77103	A	20050317		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1703322	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C1; G03F007/039C1S
JP 2006259277	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41
US 20060210922	IPCI	G03C0001-76 [I,A]
	IPCR	G03C0001-76 [I,C]; G03C0001-76 [I,A]
	NCL	430/270.100
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C1; G03F007/039C1S

OS MARPAT 145:366479
GI

/ Structure 44 in file .gra /

AB A pos. resist compn. comprising: (A) a resin insol. or sparingly sol. in an alkali but capable of decompg. under an action of an acid to increase a soly. in an alkali developer, the resin having a .beta.-(meth)acroyloxy-.gamma.-butyrolactone repeating unit represented by the following formula (I) wherein R represents a H or an alkyl group and the lactone ring may have a substituent;. (B) a compd. capable of generating an org. acid represented by the formula (F)l(R1)n(R2)mSO2HAr wherein R1 represents an org. group having a F atom; R2 represents an OH or an org. group; Ar represents an arom. group; l is an integer of 1 to 6; m and n are an integer of 0 to 4, provided that m+n represents an integer of 1 or more;. And the formula HO3SZ1Z2SO2Z3Z4R3 and (HO3SZ1Z2SO2Z3Z4R3)pZ5 wherein Z1 represents a divalent linking group; Z2 and Z3 each independently represents a single bond, an O atom or NR4; R4 represents a H, an aryl

group, an alkyl group or a cycloalkyl group; Z4 represents a single bond or CO; R3 represents a H or an org. group; p is 2 or 3; Z5 represents a p-valent linking group, and when Z3 is NR4, R3 and R4, or Z5 and R4 may combine to form a ring;. And formulas (II) and (III) wherein Y represents an alkylene group substituted by at least one F atom, and R5 represents an alkyl group or a cycloalkyl group. These compns. undergo a reaction irradn. of actinic rays or radiation.

ST pos resist compn resin insol alkali butyrolactone polymer; irradn actinic ray radiation

IT Positive photoresists
(pos. resist compn. and pattern forming method)

IT ***808752-25-2P*** 852572-09-9P 863024-59-3P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoacid generator; pos. resist compn. and pattern forming method)

IT 852572-15-7 902096-34-8 910251-59-1
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; pos. resist compn. and pattern forming method)

IT 110-89-4, Piperidine, reactions 112-53-8, 1-Dodecanol 313-50-8D, Pentafluorobenzenesulfonic acid, methylpropanyl ester 3744-08-9, Triphenylsulfonium iodide 82727-16-0 588668-97-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos. resist compn. and pattern forming method)

IT 19600-49-8P, Triphenylsulfonium acetate 82727-09-1P 852572-07-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pos. resist compn. and pattern forming method)

IT 312620-52-3P 348631-34-5P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. and pattern forming method)

IT 24544-04-5, 2,6-Diisopropylaniline
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and pattern forming method)

IT 11114-17-3, Fluorad FC 430 137462-24-9, Megafac F 176 863402-96-4, PF 636 868612-03-7, PF 656 868612-04-8, PF 6320
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactant; pos. resist compn. and pattern forming method)

L14 ANSWER 81 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:949983 CAPLUS <<LOGINID::20080627>>
DN 145:345253
ED Entered STN: 15 Sep 2006
TI Positive photosensitive composition for far UV and pattern-forming method using the same
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 49pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1701214	A1	20060913	EP 2006-4947	20060310

EP 1701214 B1 20080423
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU
US 20060204890 A1 20060914 US 2006-370983 20060309
JP 2006285228 A 20061019 JP 2006-66355 20060310
AT 393413 T 20080515 AT 2006-4947 20060310
PRAI JP 2005-68920 A 20050311
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1701214	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]
	ECLA	G03F007/004D; G03F007/039C1S; S03F
US 20060204890	IPCI	G03C0001-76 [I,A]
	IPCR	G03C0001-76 [I,C]; G03C0001-76 [I,A]
	NCL	430/270.100
	ECLA	G03F007/004D; G03F007/039C1S
JP 2006285228	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/FA12
AT 393413	IPCI	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]
	ECLA	G03F007/004D; G03F007/039C1S; S03F

OS MARPAT 145:345253

AB A pos. photosensitive compn. is described which comprises a resin having .gtoreq.1 repeating unit having a specific lactone structure at a side chain and being capable of be decompd. by the action of an acid to increase its soly. in an alkali developer; and a compd. capable of generating a specific acid upon irradn. with an actinic ray or a radiation. A pattern-forming method using the pos. photosensitive compn. is also described.

ST pos photosensitive compn patterning irradn line edge roughness; polymer lactone side chain generating acid irradn UV

IT Positive photoresists
(pos. photosensitive compn. for far UV and pattern-forming method)

IT 3744-08-9, Triphenylsulfonium iodide 90076-65-6 588668-97-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos. photosensitive compn. for far UV and pattern-forming method therefor)

IT 436852-48-1P 460731-17-3P ***808752-25-2P***
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photosensitive compn. for far UV and pattern-forming method therefor)

IT 115372-36-6D, polymers with methyladamantyl methacrylate and methacryloyloxynorbornanecarboxylate deriv. 177080-67-0D, polymers with hydroxyadamantyl methacrylate and methacryloyloxynorbornanecarboxylate deriv. 460731-18-4 591743-63-4 849023-22-9 ***862261-67-4*** 873017-65-3 879179-84-7 909789-34-0 909789-35-1 909868-58-2 909868-59-3 909868-60-6 909868-62-8 909868-63-9 909868-64-0

909868-65-1 909868-66-2 909868-67-3 909868-68-4 909868-69-5
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photosensitive compn. for far UV and pattern-forming method therefor)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Chen, C; US 2004241569 A1 2004
(2) Kinsho, T; US 2003008232 A1 2003 CAPLUS
(3) Mitsubishi Rayon Co Ltd; EP 1352904 A 2003 CAPLUS

L14 ANSWER 82 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:835542 CAPLUS <<LOGINID::20080627>>
DN 145:281053
ED Entered STN: 23 Aug 2006
TI Resist composition, compound for pattern forming method
IN Kawanishi, Yasutomo
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 97pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1693705	A2	20060823	EP 2006-3382	20060220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 20060194147	A1	20060831	US 2006-356048	20060217
	JP 2007094356	A	20070412	JP 2006-42690	20060220
PRAI	JP 2005-42328	A	20050218		
	JP 2005-252611	A	20050831		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1693705	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; G03F0007-075 [I,A]
	ECLA	G03F007/039C1S; G03F007/004D; G03F007/004F; G03F007/038C; G03F007/075M2
US 20060194147	IPCI	G03C0001-76 [I,A]
	NCL	430/270.100
	ECLA	G03F007/039C1S; G03F007/004D; G03F007/004F; G03F007/038C; G03F007/075M2
JP 2007094356	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC05; 2H025/AC06; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CB52; 2H025/CC17; 2H025/CC20; 2H025/FA01

OS MARPAT 145:281053

GI

/ Structure 45 in file .gra /

AB The invention provides a resist compn. for use in the prodn. process of a semiconductor such as IC, in the prodn. of a circuit substrate of liq. crystal, thermal head and the like or in other photofabrication processes, a compd. for use in the resist compn. and a pattern forming method using the resist compn., which are a resist compn. comprising a sulfonium salt represented by I (R1 = alkyl group or an aryl group; R2-9 = hydrogen atom or a substituent and may combine with each other to form a ring; Z = an electron-withdrawing divalent linking group; Xn- = an n-valent anion; n = an integer of 1 to 3; and m = the no. of anions necessary for neutralizing the elec. charge); and a pattern forming method using the resist compn.

ST photoresist compn pattern sulfonium salt

IT Photoresists
(photoresist compn., compd. for pattern forming method contg.)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compn., compd. for pattern forming method contg.)

IT 250378-10-0 289623-64-9 312620-54-5 366808-82-4 398140-43-7
482609-97-2 524699-47-6 610300-93-1 610300-94-2 610300-95-3
610300-96-4 906554-14-1 906554-15-2
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(photoresist compn. for pattern forming method contg.)

IT 2362-50-7P, Thianthrene-S-oxide 906553-15-9P 906553-18-2P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonium salt for photoresist compn.)

IT 906553-07-9P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of sulfonium salt for photoresist compn.)

IT 906553-08-0P 906553-11-5P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of sulfonium salt for photoresist compn.)

IT 92-85-3, Thianthrene 99-90-1 103-73-1, Ethoxybenzene 147-93-3, Thiosalicylic acid 375-73-5, Nonafluorobutanesulfonic acid 492-22-8, Thioxanthen-9-one 25601-74-5, 3,5-Bistrifluoromethylbenzenesulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of sulfonium salt for photoresist compn.)

IT 27011-90-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonium salt for photoresist compn.)

IT 906553-21-7P 906553-25-1P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sulfonium salt for photoresist compn.)

IT 906553-27-3 906553-29-5 ***906553-31-9*** 906553-33-1
906553-35-3 906553-37-5 906553-39-7 ***906553-41-1***
906553-43-3 906553-45-5 906553-47-7 906553-49-9 906553-51-3

906553-53-5 906553-55-7 906553-57-9 906553-59-1 ***906553-61-5***
906553-63-7 906553-65-9 ***906553-67-1*** 906553-69-3
906553-70-6 906553-72-8 906553-74-0 906553-75-1 906553-76-2
906553-77-3 906553-79-5 906553-80-8 ***906553-82-0***
906553-84-2 ***906553-86-4*** 906553-88-6 906553-90-0
906553-92-2 906553-94-4 906553-96-6 906553-98-8 906554-00-5
906554-02-7 906554-04-9 906554-06-1 906554-08-3 906554-10-7
906554-12-9
RL: TEM (Technical or engineered material use); USES (Uses)
(sulfonium salt for photoresist compn. and pattern forming method)

L14 ANSWER 83 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:796154 CAPLUS <<LOGINID::20080627>>
DN 145:238217
ED Entered STN: 11 Aug 2006
TI Positive-working resist composition and method for resist pattern formation
IN Takeshita, Masaru
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 57pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006082740	A1	20060810	WO 2006-JP301127	20060125
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006215068	A	20060817	JP 2005-24869	20050201
	CN 101107567	A	20080116	CN 2006-80003225	20060125
	KR 2007101316	A	20071016	KR 2007-718291	20070809
PRAI	JP 2005-24869	A	20050201		
	WO 2006-JP301127	W	20060125		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006082740	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	ECLA	G03F007/039C1S
JP 2006215068	IPCI	G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]

FTERM 2H025/AB16; 2H025/AC01; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/CC20
CN 101107567 IPCI G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
IPCR G03F0007-039 [I,C]; G03F0007-039 [I,A]
KR 20071013l6 IPCI G03F0007-039 [I,A]

AB This invention provides a pos.-working resist compn. comprising a resin component (A), of which the alkali soly. is increased upon the action of an acid, and an acid generating agent component (B) capable of generating an acid upon exposure. In the pos.-working resist compn., the resin component (A) is a mixt. of a copolymer (A1) comprising constitutional units (a1) derived from an acid dissociative dissoln. inhibiting group-contg. acrylic ester, constitutional units (a2) derived from a lactone-contg. monocyclic group-contg. methacrylic ester, and constitutional units (a3) derived from an acrylic ester contg. a polar group-contg. polycyclic group, and a copolymer (A2) having a structure different from the copolymer (A1) and having a lower hydrophilicity than the copolymer (A1).

ST pos working resist compn photoresist pattern formation resin component

IT Positive photoresists
(pos.-working resist compn. and method for resist pattern formation)

IT 309751-48-2 ***808752-25-2***
RL: CAT (Catalyst use); USES (Uses)
(pos.-working resist compn. and method for resist pattern formation)

IT 102-71-6, Triethanolamine, uses
RL: MOA (Modifier or additive use); USES (Uses)
(pos.-working resist compn. and method for resist pattern formation)

IT 591743-65-6 756877-86-8
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(pos.-working resist compn. and method for resist pattern formation)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; TW 0581941 B 2003 CAPLUS
(2) Fuji Photo Film Co Ltd; JP 2003005375 A 2003 CAPLUS
(3) Fuji Photo Film Co Ltd; JP 20035374 A 2003
(4) Tokyo Ohka Kogyo Co Ltd; JP 2000267269 A 2000 CAPLUS
(5) Tokyo Ohka Kogyo Co Ltd; EP 1452919 A1 2003 CAPLUS
(6) Tokyo Ohka Kogyo Co Ltd; WO 2003048863 A1 2003
(7) Tokyo Ohka Kogyo Co Ltd; JP 2003167347 A 2003 CAPLUS
(8) Tokyo Ohka Kogyo Co Ltd; US 20040058269 A1 2003
(9) Tokyo Ohka Kogyo Co Ltd; WO 2004114022 A1 2005 CAPLUS
(10) Tokyo Ohka Kogyo Co Ltd; JP 2005010488 A 2005 CAPLUS

L14 ANSWER 84 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:730440 CAPLUS <<LOGINID::20080627>>
DN 145:198789
ED Entered STN: 27 Jul 2006
TI Photosensitive composition, compound for use in the photosensitive composition and pattern forming method using the photosensitive composition
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 87 pp.
CODEN: EPXXDW
DT Patent
LA English

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1684116	A2	20060726	EP 2006-1308	20060123
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006201711	A	20060803	JP 2005-15965	20050124
	US 20060166135	A1	20060727	US 2006-335679	20060120
	KR 2006085595	A	20060727	KR 2006-7264	20060124
PRAI	JP 2005-15965	A	20050124		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1684116	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; G03F0007-038 [I,A]; G03F0007-075 [I,A]; C07C0271-00 [I,A]
	IPCR	G03F0007-004 [I,A]; C07C0271-00 [I,C]; C07C0271-00 [I,A]; G03F0007-004 [I,C]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-075 [I,C]; G03F0007-075 [I,A]
	ECLA	G03F007/004F; G03F007/004D; G03F007/038C; G03F007/039C1S; G03F007/075M
JP 2006201711	IPCI	G03F0007-004 [I,A]; G03F0007-038 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]; G03F0007-038 [I,C]; G03F0007-038 [I,A]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE00; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CC17
US 20060166135	IPCI	G03C0001-76 [I,A]
	IPCR	G03C0001-76 [I,A]; G03C0001-76 [I,C]
	NCL	430/270.100
	ECLA	G03F007/004F; G03F007/004D; G03F007/038C; G03F007/039C1S; G03F007/075M
KR 2006085595	IPCI	G03F0007-004 [I,A]

OS MARPAT 145:198789

AB A photosensitive compn. is described for use in the prodn. process of a semiconductor such as IC, in the prodn. of a circuit substrate of liq. crystal, thermal head and the like. The photosensitive compn. comprises a compd. capable of generating an org. acid having a bond which is cleaved by an acid, upon irradn. with actinic rays or radiation. The org. acid has the structure :N-C(O)O- in combination with HO3S-A-X-B-R [A = divalent linking group, X = single bond or -SO2-, B = single bond, an O atom or -N(Rx)-, Rx = H or a monovalent org. group, R = monovalent org. group contg. a N atom, the N atom being substituted by -C(O)-O-R', R' = monovalent org. group, when B is -N(Rx)-, R and Rx may combine to form a ring]. The photosensitive compn. is excellent in the sensitivity, resoln. and pattern profile, assured of large exposure latitude and small pitch dependency, and improved in the sensitivity and dissoln. contrast at the exposure with EUV light.

ST photosensitive compn integrated circuit semiconductor liq crystal printer head; photoacid generator photosensitive compn

IT Thermal printers

(heads; photosensitive compn., compd. for use in photosensitive compn. and pattern forming method using the photosensitive compn.)

IT Integrated circuits
Liquid crystals
Photoimaging materials
Photoresists
Resists
(photosensitive compn., compd. for use in photosensitive compn. and pattern forming method using the photosensitive compn.)

IT 120-07-0, N-Phenyldiethanolamine 621-77-2, Tripentylamine 24544-04-5, 2,6-Diisopropylaniline 34684-40-7 70384-51-9 158593-28-3
177034-75-2 249743-11-1 258879-87-7 284474-28-8 325143-38-2
398140-43-7 425670-64-0 474510-73-1 482609-97-2 524699-47-6
541547-03-9 607357-61-9 610300-93-1 610300-94-2 610301-49-0
615278-35-8 ***808752-25-2*** 848408-51-5 848408-52-6
852572-15-7 867373-18-0 879182-17-9 881659-11-6 881659-13-8
902095-99-2 902096-02-0 902096-05-3 902096-08-6 902096-11-1
902096-13-3 902096-14-4 902096-16-6 902096-18-8 902096-20-2
902096-22-4 902096-24-6 902096-27-9 902096-29-1 902096-32-6
902096-34-8 902096-36-0 902096-39-3 902129-96-8
RL: NUU (Other use, unclassified); USES (Uses)
(photosensitive compn., compd. for use in photosensitive compn. and pattern forming method using the photosensitive compn.)

IT 902095-95-8P
RL: NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(photosensitive compn., compd. for use in photosensitive compn. and pattern forming method using the photosensitive compn.)

IT 121-44-8, Triethylamine, reactions 3353-89-7, Triphenylsulfonium bromide 57260-71-6 82727-16-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(photosensitive compn., compd. for use in photosensitive compn. and pattern forming method using the photosensitive compn.)

L14 ANSWER 85 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:705903 CAPLUS <<LOGINID::20080627>>
DN 145:155750
ED Entered STN: 20 Jul 2006
TI Near-IR-absorbing coatings and laminates using them with excellent visible light transmittance and heat and light resistance
IN Kato, Shunichi; Fujisaki, Yuko; Yoshinari, Tomo; Tokutome, Kazuto
PA Toyo Ink Mfg. Co., Ltd., Japan; Toppan Printing Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006188653	A	20060720	JP 2005-297257	20051012
PRAI	JP 2004-357992	A	20041210		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES

JP 2006188653 IPCI C09D0201-02 [I,A]; C09K0003-00 [I,A]; C09B0053-02 [I,A]; C09B0053-00 [I,C*]; C09B0069-06 [I,A]; C09B0069-00 [I,C*]; C09D0007-12 [I,A]; C09D0005-32 [I,A]; B32B0027-18 [I,A]

FTERM 4F100/AH03A; 4F100/AH03H; 4F100/AH04A; 4F100/AH04H; 4F100/AH05A; 4F100/AH05H; 4F100/AK01B; 4F100/AK25A; 4F100/AK25J; 4F100/AK42; 4F100/AL01A; 4F100/AR00C; 4F100/AT00B; 4F100/BA02; 4F100/BA03; 4F100/BA04; 4F100/BA05; 4F100/BA10A; 4F100/BA10B; 4F100/BA10C; 4F100/CA05A; 4F100/CA07A; 4F100/CA30A; 4F100/CB00; 4F100/GB41; 4F100/JD08C; 4F100/JD09C; 4F100/JD10A; 4F100/JD10H; 4F100/JJ03; 4F100/JJ10C; 4F100/JK09C; 4F100/JK10C; 4F100/JN01; 4F100/JN06C; 4J038/CG141; 4J038/CH071; 4J038/CH081; 4J038/CH121; 4J038/GA06; 4J038/GA07; 4J038/GA08; 4J038/GA09; 4J038/GA16; 4J038/JB01; 4J038/JB18; 4J038/JB35; 4J038/JC15; 4J038/JC38; 4J038/KA12; 4J038/NA19; 4J038/PB08; 4J038/PB09; 4J038/PC08

OS MARPAT 145:155750

GI

/ Structure 46 in file .gra /

AB The coatings, useful for optical filters for plasma display panels, contain copolymers (A) bearing cycloalkyl-contg. monomer units, diimmonium compds. I [B: R1-8 = H, OH (un)substituted alkyl, cycloalkyl, etc.; ring A and B may have substituent], and optionally phthalocyanines (C) and/or dithiol-metal complexes (D), cyanine compds. (E), and UV absorbers (E) and/or hindered amine light stabilizers (F).

ST near IR absorption coating cycloalkyl polymer; plasma display filter immonium light stability; IR shield cyclohexyl methacrylate heat resistance

IT Optical materials
(IR absorbers; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)

IT IR materials
(absorbers; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)

IT Amines, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(hindered, light stabilizers; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)

IT Light stabilizers
Plasma display panels
UV stabilizers
(near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)

IT Laminated plastics, uses
Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(near-IR-absorbing coatings for optical filters with good visible light

transmittance and heat and light resistance)
IT Optical filters
(near-IR; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 147-14-8, Excolor IR 14
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(Excolor IR 14; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 25038-59-9, PET polymer, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(HBF 8W, film, coated; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 84268-22-4, Tinuvin 384-2
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(UV absorber; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 888221-42-9, Kayasorb IRG 068 897042-94-3, CIR-RL
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(diimmonium salt; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 899801-61-7, K 1032
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(diimmonium; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 27517-36-8P, Cyclohexyl methacrylate-methyl methacrylate copolymer 86156-09-4P, Cyclohexyl methacrylate-2-ethylhexyl acrylate-methyl methacrylate copolymer 899446-17-4P, Cyclohexyl methacrylate-2-ethylhexyl acrylate-methyl methacrylate-RUVA 93 copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 28984-20-5, MIR 101 115970-62-2, Kayasorb CY 17 454479-70-0 454479-72-2 454479-73-3 536741-75-0 700876-23-9 ***700876-26-2*** 899446-19-6
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)
IT 801220-15-5, Excolor IR 10A
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(phthalocyanine deriv.; near-IR-absorbing coatings for optical filters with good visible light transmittance and heat and light resistance)

L14 ANSWER 86 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:655347 CAPLUS <<LOGINID::20080627>>
DN 145:92995
ED Entered STN: 07 Jul 2006
TI Positive resist compositions for far UV exposure and method for their patterning
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006178172	A	20060706	JP 2004-371122	20041222
PRAI JP 2004-371122		20041222		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006178172	IPCI	G03F0007-039 [I,A]; C08F0220-18 [I,A]; C08F0220-00 [I,C*]; G03F0007-033 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA00; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/BA03R; 4J100/BA04P; 4J100/BA12P; 4J100/BA15Q; 4J100/BC02P; 4J100/BC03P; 4J100/BC03Q; 4J100/BC04P; 4J100/BC04Q; 4J100/BC08P; 4J100/BC08Q; 4J100/BC08R; 4J100/BC09P; 4J100/BC09Q; 4J100/BC09R; 4J100/BC12P; 4J100/BC12Q; 4J100/BC12R; 4J100/BC15P; 4J100/CA04; 4J100/CA05; 4J100/DA01; 4J100/DA04; 4J100/DA39; 4J100/FA03; 4J100/FA19; 4J100/JA38

GI

/ Structure 47 in file .gra /

AB The compns. contain (A1) polymers having structural repeating unit (CH2CR1A1CO2ALG) (R1 = H, methyl; A1 = single bond, connection group; ALG = Q1(I), CR12R13R14, CH(OR15)R16, Q4, CR22R25CHR23COR24; R11 = Me, Et, Pr, iso-Pr, Bu, iso-Bu, sec-butyl; Z = groups forming alicyclic hydrocarbon with C; R12-16, R22-25 = alkyl, alicyclic hydrocarbon; .gtoreq.1 of R12-14, R15 or R16, .gtoreq.1 of R22-25 are alicyclic hydrocarbon; R17-21 = H, alkyl, alicyclic hydrocarbon; .gtoreq.1 of R17-21 is alicyclic hydrocarbon; R19 or R21 is alkyl or alicyclic hydrocarbon; R23 and R24 may bond to form a ring), (A2) polymers having structural repeating unit (CH2CR2CO2A2CO2CR3R4R5) (R2 = H, alkyl; R3-5 = alkyl, alicyclic hydrocarbon; .gtoreq.1 of R3-5 is alicyclic hydrocarbon or 2 out fo R3-5 form alicyclic hydrocarbon; A2 = divalent bridging hydrocarbon), and (B) photoacid generators. Patterning the compn. is also claimed. The resist compns. have wide latitude and are patterned under excellent in-plane line width uniformity.

ST pos photoresist adamantane methacrylate; far UV pos photoresist line width uniformity

IT Positive photoresists
(alicyclic acrylic polymer pos. resist compns. for patterning with far UV)

IT 258879-87-7P 351197-82-5P 849023-23-0P 873546-13-5P 881659-13-8P

893411-57-9P 893411-59-1P 893411-60-4P 893411-61-5P 893411-63-7P
893441-93-5P 893443-00-0P 893443-03-3P 893443-04-4P 893443-05-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alicyclic acrylic polymer pos. resist compns. for patterning with far UV)

IT 135133-12-9 258872-05-8 284474-28-8 301153-77-5 301664-71-1
398141-18-9 425670-64-0 474510-73-1 506445-10-9 541547-03-9
808752-25-2 852245-69-3 852245-71-7 852572-09-9
852572-15-7 867373-18-0
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(photoacid generators; alicyclic acrylic polymer pos. resist compns. for patterning with far UV)

L14 ANSWER 87 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:435401 CAPLUS <<LOGINID::20080627>>
DN 146:368572
ED Entered STN: 11 May 2006
TI Optimization of photoacid generator in CA resist for EUVL
AU Watanabe, Takeo; Hada, Hideo; Kinoshita, Hiroo; Tanaka, Yuzuru; Shiotani, Hideaki; Fukushima, Yasuyuki; Komano, Hiroji
CS Lab. of Advanced Science and Technology for Industry, Univ. of Hyogo, 3-1-2, Kouto, Kamigoori-cho, Akou-gun, Hyogo, 678-1205, Japan
SO Proceedings of SPIE-The International Society for Optical Engineering (2006), 6153(Pt. 2, Advances in Resist Technology and Processing XXIII), 615343/1-615343/9
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
AB We succeed in developing beneficial photoacid generator (PAG) for EUV exposure. In a high annealing type resist system in which poly-hydroxystyrene employed as a base resin, we found that sulfonium salts which employed cyclo(1,3-perfluoropropanedisulfone) imidate employed as a anion of PAG is more sensitive than perfluorobutanesulfonate employed as an anion of PAG under extreme UV (EUV) exposure. However, the sensitivities were different under EUV and electron beam (EB) exposures. It indicates that the distinctive acid prodn. reaction is occurred under EUV exposure in comparing under EB exposure. As results of the time dependency mass spectroscopy and the Fourier Transform IR Spectroscopy (FT-IR), EUV induced reaction of cyclo(1,3-perfluoropropanedisulfone) imidate employed as an anion of PAG occurred more efficiently than that of perfluorobutanesulfonate employed as an anion of PAG.
ST optimization photoacid generator CA resist EUVL
IT Photoresists
(EUV, chem. amplified; optimization of photoacid generator in CA resist for EUVL)
IT Photolithography
(extreme-UV; optimization of photoacid generator in CA resist for EUVL)
IT Optimization
(optimization of photoacid generator in CA resist for EUVL)
IT 159296-87-4, 4-Hydroxystyrene-tert-butyl acrylate copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(optimization of photoacid generator in CA resist for EUVL)
IT 144317-44-2 194999-85-4 ***808752-25-2*** ***862261-69-6***
RL: TEM (Technical or engineered material use); USES (Uses)
(optimization of photoacid generator in CA resist for EUVL)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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(2) Hada, H; Proc SPIE 2004, V5374, P686 CAPLUS
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(17) Watanabe, T; Photopolym Sci Technol 2001, V14, P555 CAPLUS
(18) Watanabe, T; Proc SPIE 2000, V3997, P600
(19) Yueh, W; Proc SPIE 2004, V5376, P434

L14 ANSWER 88 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:340231 CAPLUS <<LOGINID::20080627>>
DN 144:379106
ED Entered STN: 13 Apr 2006
TI Positive-working photoresist composition and method for pattern formation using the same
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 76 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006098740	A	20060413	JP 2004-284810	20040929
PRAI JP 2004-284810		20040929		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006098740	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA01; 2H025/AA03; 2H025/AA14; 2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CC03; 2H025/FA17

GI

/ Structure 48 in file .gra /

AB The title compn. contains an acid-sensitive alkali-solubilizable resin with a lactone group, an photoacid generator and a solvent, wherein the resin has repeating group I(R2-4= H, alkyl, cycloalkyl, etc.; R5 = alkyl) and wherein the photoacid generator has general structure II(Y = alkylene with a F substituent). The compn. shows improved post-exposure baking(PEB) temp. dependence and provides good pattern profile.
ST pos photoresist compn resin photoacid generator
IT Photolithography
Positive photoresists
(pos.-working photoresist compn. and method for pattern formation using the same)
IT ***808752-25-2*** ***862261-51-6*** ***862261-55-0*** ***862261-67-4*** 882516-82-7 882516-83-8
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; pos.-working photoresist compn. and method for pattern formation using the same)
IT 881191-94-2P 881191-95-3P 881191-97-5P 882516-79-2P 882516-80-5P 882516-81-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin; pos.-working photoresist compn. and method for pattern formation using the same)

L14 ANSWER 89 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:267338 CAPLUS <<LOGINID::20080627>>
DN 144:293717
ED Entered STN: 23 Mar 2006
TI Anticorrosive gel electrolytes with high ionic conductivity and good thermal stability, and their manufacture
IN Motoge, Shinji; Kamei, Teruaki; Tamura, Masaaki; Yamaguchi, Hiroshi; Yamamoto, Hideo
PA Japan Carlit Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 37-6 (Plastics Manufacture and Processing)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006077107	A	20060323	JP 2004-261807	20040909
PRAI	JP 2004-261807		20040909		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006077107	IPCI	C08L0033-08 [I,A]; C08L0033-00 [I,C*]; C08K0005-46 [I,A]; C08K0005-00 [I,C*]; H01B0001-06 [I,A]; H01B0013-00 [I,A]; H01M0010-40 [I,A]; H01M0010-36 [I,C*]; H01M0014-00 [I,A]; H01G0009-038 [I,A]; H01G0009-035 [I,A]; H01G0009-022 [I,C*]; H01G0009-00

[I,A]

FTERM 4J002/BG041; 4J002/BG051; 4J002/BG061; 4J002/BG071; 4J002/EV316; 4J002/FD116; 4J002/GQ02; 5G301/CD01; 5H029/AJ06; 5H029/AJ13; 5H029/AJ14; 5H029/AM07; 5H029/AM09; 5H029/AM16; 5H029/HJ02; 5H032/AA06; 5H032/CC17; 5H032/EE14; 5H032/EE20

OS MARPAT 144:293717

GI

/ Structure 49 in file .gra /

AB The electrolytes, useful for Li secondary batteries, capacitors, etc., comprise acrylic ester polymer matrixes and room-temp. ionic liqs. comprising cyclic perfluoroalkylenedisulfonimide salts of I (n = 2-8, X+ = quaternary onium cation). The manufg. method includes mixing .gtoreq.1 difunctional acrylic esters of H2C:CR1CO2(AO)nCOCR2:CH2 (R1,2 = H, C1-6 alkyl; AO = C2-20 oxyalkylene; n = 1-200) and .gtoreq.1 acrylic esters in the presence of room-temp. ionic liqs. of I and polymn. initiators, heating, and polymg. Thus, a soln. contg. poly(ethylene glycol) dimethacrylate 1.5, methoxyethyl acrylate 5, tert-Bu peroxy-2-ethylhexanoate 0.5, and ionic liq. of I (n = 3, X+ = 1-ethyl-3-methylimidazolium) 93% was coated on a glass sheet and polymd. at 90.degree. for 3 h to give a 1 mm-thick gel sheet showing ionic cond. at 30.degree. 8.3 .times. 10-3 S/cm and no wt. loss after heating at 200.degree..

ST anticorrosive gel electrolyte high ionic cond; cyclic perfluoroalkylenedisulfonimide ionic liq acrylate polymer; polyethylene glycol methacrylate methoxyethyl acrylate polymer gel; imidazolium perfluoropropylenedisulfonimide gel electrolyte thermal stability

IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, matrixes; manuf. of anticorrosive gel electrolytes with high ionic cond. and good thermal stability)

IT Gels
Ionic liquids
Polymer electrolytes
(manuf. of anticorrosive gel electrolytes with high ionic cond. and good thermal stability)

IT 2923-20-8, Lithium pentafluoroethanesulfonate 33454-82-9, Lithium trifluoromethanesulfonate 90016-22-1, Lithium heptafluoropropanesulfonate 90076-65-6, Lithiotrifluoromethanesulfonimide 132404-42-3 132843-44-8 189217-59-2 189217-62-7, 1,3-Disulfonylhexafluoropropyleneimide lithium salt 210406-60-3 210406-61-4
RL: TEM (Technical or engineered material use); USES (Uses)
(manuf. of anticorrosive gel electrolytes with high ionic cond. and good thermal stability)

IT 80501-32-2P, Methoxyethyl acrylate-poly(ethylene glycol) dimethacrylate copolymer 135834-31-0P, Ethylene glycol dimethacrylate-triethylene glycol dimethacrylate copolymer 869213-64-9P, Methoxyethyl acrylate-1,9-nonanediol diacrylate copolymer 879012-86-9P 879012-88-1P, Ethoxymethyl acrylate-poly(ethylene glycol) diacrylate copolymer 879012-91-6P, Methoxyethyl acrylate-1,8-octanediol diacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(matrix; manuf. of anticorrosive gel electrolytes with high ionic cond. and good thermal stability)

IT 927-07-1, tert-Butylperoxy pivalate 3006-82-4, tert-Butyl peroxy-2-ethylhexanoate
RL: CAT (Catalyst use); USES (Uses)
(polymn. initiator; manuf. of anticorrosive gel electrolytes with high ionic cond. and good thermal stability)

IT ***879012-85-8*** , 1-Ethyl-3-methylimidazolium 1,3-disulfonylhexafluoropropyleneimide ***879012-87-0*** , N-Hexylpyridinium 1,3-disulfonylhexafluoropropyleneimide ***879012-89-2*** , N-Methoxyethyl-N-methylpyrrolidinium 1,3-disulfonylhexafluoropropyleneimide ***879012-90-5*** , 1,3-Dimethylimidazolium 1,3-disulfonylhexafluoropropyleneimide
RL: TEM (Technical or engineered material use); USES (Uses)
(room-temp. ionic liq.; manuf. of anticorrosive gel electrolytes with high ionic cond. and good thermal stability)

L14 ANSWER 90 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:234860 CAPLUS <<LOGINID::20080627>>
DN 144:321520
ED Entered STN: 16 Mar 2006
TI Electron-beam or EUV (extreme ultraviolet) resist composition and process for the formation of resist patterns
IN Hada, Hideo; Shiono, Daiju; Kinoshita, Hiroo; Watanabe, Takeo
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006027997	A1	20060316	WO 2005-JP16013	20050901
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006078760	A	20060323	JP 2004-262488	20040909
	EP 1791024	A1	20070530	EP 2005-781331	20050901
	R: DE, FR, IT				
	US 20070269744	A1	20071122	US 2007-573884	20070216
	KR 2007040831	A	20070417	KR 2007-705189	20070305
PRAI	JP 2004-262488	A	20040909		
	WO 2005-JP16013	W	20050901		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006027997	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-004 [I,A]; G03F0007-004 [I,C]; G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
JP 2006078760	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA01; 2H025/AC04; 2H025/AC06; 2H025/AD03; 2H025/BE07; 2H025/BG00; 2H025/CC20; 2H025/FA03; 2H025/FA12; 2H025/FA17
EP 1791024	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
US 20070269744	IPCI	G03C0001-00 [I,A]
	NCL	430/286.100
KR 2007040831	IPCI	G03F0007-004 [I,A]

OS MARPAT 144:321520
GI

/ Structure 50 in file .gra /

AB The invention relates to an electron-beam or EUV resist compn. comprising (A) a resin component which can be changed in alkali soly. by the action of an acid and (B) an acid generator component which can generate an acid on being exposed to light, characterized in that the component (B) contains at least one of the onium salts bearing anions represented by the general formulas I and Y-SO2-N--SO2-Z wherein X is C2-6 alkylene wherein at least one hydrogen is replaced by fluorine; and Y and Z are each independently C1-10 alkyl wherein at least one hydrogen is replaced by fluorine. The compn. shows high sensitivity towards EUV and electron beam.

ST electron beam EUV resist compn lithog

IT Electron beam lithography
Electron beam resists
Photolithography
Photoresists
(electron-beam or EUV resist compn. and process for formation of resist patterns)

IT ***808752-25-2*** ***850483-11-3***
RL: TEM (Technical or engineered material use); USES (Uses)
(invention's compd. in electron-beam or EUV resist compn.)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; JP 2003307850 A 2003 CAPLUS
(2) Fuji Photo Film Co Ltd; JP 2005221721 A 2005 CAPLUS
(3) International Business Machines Corp; WO 03003120 A1 2003 CAPLUS
(4) International Business Machines Corp; US 2003008230 A1 2003 CAPLUS
(5) International Business Machines Corp; JP 2005504329 A1 2003
(6) Sumitomo Chemical Co Ltd; US 20030148211 A1 2003 CAPLUS
(7) Sumitomo Chemical Co Ltd; JP 2003171363 A 2003 CAPLUS
(8) Sumitomo Chemical Co Ltd; JP 2003231673 A 2003 CAPLUS
(9) Sumitomo Chemical Co Ltd; JP 2003287884 A 2003 CAPLUS
(10) Tokyo Ohka Kogyo Co Ltd; JP 2005172949 A 2005 CAPLUS
(11) Tokyo Ohka Kogyo Co Ltd; JP 2005173468 A 2005 CAPLUS

(12) Tokyo Ohka Kogyo Co Ltd; JP 2005196095 A 2005 CAPLUS

L14 ANSWER 91 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:185073 CAPLUS <<LOGINID::20080627>>
DN 144:283218
ED Entered STN: 01 Mar 2006
TI Positive resist composition and pattern forming method
IN Sato, Kenichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 61 pp.
CODEN: EPXXDW
DT Patent
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1630607	A2	20060301	EP 2005-18577	20050826
	EP 1630607	A3	20070509		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006091830	A	20060406	JP 2005-68921	20050311
	US 20060046190	A1	20060302	US 2005-210672	20050825
	US 7291441	B2	20071106		
PRAI	JP 2004-246995	A	20040826		
	JP 2005-68921	A	20050311		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1630607	IPCI	G03F0007-039 [I,A]; G03F0007-039 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]
	ECLA	G03F007/039C1S
JP 2006091830	IPCI	G03F0007-039 [I,A]; C08F0220-12 [I,A]; C08F0220-26 [I,A]; C08F0220-00 [I,C*]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA03; 2H025/AA04; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA17; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/AL08S; 4J100/AL08T; 4J100/BA02Q; 4J100/BA03R; 4J100/BA05P; 4J100/BA06P; 4J100/BA11P; 4J100/BA11S; 4J100/BA11T; 4J100/BA15Q; 4J100/BA15S; 4J100/BA15T; 4J100/BA20P; 4J100/BC02Q; 4J100/BC04Q; 4J100/BC07Q; 4J100/BC08Q; 4J100/BC08R; 4J100/BC09Q; 4J100/BC09R; 4J100/BC12Q; 4J100/BC12R; 4J100/BC53P; 4J100/BC53S; 4J100/BC53T; 4J100/BC58P; 4J100/CA03; 4J100/CA04; 4J100/CA05; 4J100/CA06; 4J100/DA01; 4J100/DA04; 4J100/JA38
US 20060046190	IPCI	G03C0001-76 [I,A]; G03F0007-004 [I,A]; G03F0007-30 [I,A]
	IPCR	G03C0001-76 [I,A]; G03C0001-76 [I,C]
	NCL	430/270.100; 430/326.000; 430/905.000; 430/910.000
	ECLA	G03F007/039C1S

AB A pos. resist compn. comprises: a resin that comprises a repeating unit including a specific norbornane lactone structure and a repeating unit

including a specific alicyclic hydrocarbon structure, and that increases a soly. of the resin in an alk. developer by an action of an acid; and a compd. that generates an acid upon treatment with one of an actinic ray and radiation. A method of forming a pattern using the photoresist is also claimed.

ST pos photoresist soly improvement norbornane lactone polymer

IT Positive photoresists
(pos. resist compn. with improved soly. in alkali developer)

IT 874491-96-0P 877870-01-4P 877870-02-5P 877870-04-7P 877870-05-8P
877870-07-0P 877870-09-2P 877870-10-5P 877870-12-7P 877870-13-8P
877870-14-9P 877870-15-0P 877980-60-4P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. with improved soly. in alkali developer)

IT 133710-62-0 144317-44-2 177034-80-9 180801-55-2 258872-05-8
284474-28-8 347193-28-6 376357-89-0 425670-64-0 ***808752-25-2***
852572-09-9 867373-18-0 ***877870-16-1***
RL: MOA (Modifier or additive use); USES (Uses)
(pos. resist compn. with improved soly. in alkali developer)

L14 ANSWER 92 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:141743 CAPLUS <<LOGINID::20080627>>
DN 144:243392
ED Entered STN: 16 Feb 2006
TI Photosensitive composition and patterning method
IN Wada, Kenji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 123 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006047533	A	20060216	JP 2004-226389	20040803
PRAI	JP 2004-226389		20040803		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006047533	IPCI	G03F0007-004 [I,A]; C07C0309-73 [I,A]; C07C0309-00 [I,C*]; C07C0311-15 [I,A]; C07C0311-00 [I,C*]; C07C0317-14 [I,A]; C07C0317-22 [I,A]; C07C0317-00 [I,C*]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA03; 2H025/AA11; 2H025/AB03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CA48; 2H025/CB41; 2H025/FA12; 4H006/AA01; 4H006/AA03; 4H006/AB92; 4H006/TA01; 4H006/TA02; 4H006/TB13; 4H006/TC09; 4H006/TC11

OS MARPAT 144:243392

AB The invention is concerned about a photoresist compn. useful in manuf. of circuit boards, where the compn. is characterized by contg. a compd. which generates certain sulfonic acid upon actinic irradn. A patterning method using the photoresist compn. is also claimed.

ST sulfonic acid generator actinic radiation photoresist

IT Photoresists
(photoresist compn. contg. actinic ray-active sulfonic acid generator)

IT Fluoropolymers, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(photoresist compn. contg. actinic ray-active sulfonic acid generator)

IT 876175-47-2P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(photoresist compn. contg. actinic ray-active sulfonic acid generator)

IT 250378-10-0P 398140-57-3P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoresist compn. contg. actinic ray-active sulfonic acid generator)

IT 39153-56-5 144089-15-6 144317-44-2 209482-18-8 258872-05-8
284474-28-8 300374-81-6 301153-78-6 301664-71-1 398141-17-8
398141-18-9 470482-89-4 541547-03-9 592544-87-1 680200-03-7
808752-25-2 876174-89-9 876174-91-3 876174-92-4
876174-93-5 876174-95-7 876174-96-8 876174-97-9 876174-99-1
876175-01-8 876175-03-0 876175-04-1 876175-05-2 876175-06-3
876175-07-4 876175-09-6 876175-10-9 876175-11-0 876175-12-1
876175-13-2 876175-14-3 876175-15-4 876175-16-5 876175-17-6
876175-18-7 876175-20-1 876175-22-3 876175-25-6 876175-28-9
876175-31-4 876175-33-6 876175-35-8 876175-36-9 876175-38-1
876175-39-2 876175-41-6 876175-43-8 876175-45-0 876175-46-1
876175-49-4 876175-51-8 876175-53-0 876175-54-1
RL: MOA (Modifier or additive use); USES (Uses)
(photoresist compn. contg. actinic ray-active sulfonic acid generator)

IT 24979-69-9, 3-Hydroxystyrene homopolymer 24979-70-2, 4-Hydroxystyrene homopolymer 158593-28-3 185405-14-5 249743-11-1 312620-54-5
321164-59-4 345212-27-3 370866-39-0 398140-38-0 398140-43-7
398140-80-2 406702-00-9 459418-30-5 482609-97-2 515876-73-0
524699-47-6 574735-94-7 607710-65-6 607710-68-9 607710-73-6
610300-93-1 610300-94-2 610300-95-3 610301-50-3 845795-93-9
848408-51-5 848408-52-6 862997-27-1
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(photoresist compn. contg. actinic ray-active sulfonic acid generator)

IT 876175-55-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonic acid generator)

IT 112-55-0, 1-Dodecylthiol 3353-89-7, Triphenylsulfonium bromide
330556-05-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of sulfonic acid generator)

L14 ANSWER 93 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:120382 CAPLUS <<LOGINID::20080627>>
DN 144:182261
ED Entered STN: 09 Feb 2006
TI Conductive agent and conductive resin composition
IN Motoge, Shinji; Kamei, Teruaki; Tamura, Masaaki; Yamaguchi, Hiroshi; Yamamoto, Hideo
PA Japan Carlit Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
CC 76-2 (Electric Phenomena)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006040659	A	20060209	JP 2004-216881	20040726
PRAI JP 2004-216881		20040726		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006040659	IPCI	H01B0001-06 [I,A]; C08K0005-43 [I,A]; C08K0005-00 [I,C*]; C08L0101-00 [I,A]; H01B0001-20 [I,A]
	FTERM	4J002/AC071; 4J002/AC081; 4J002/BB031; 4J002/BB121; 4J002/BC031; 4J002/BD041; 4J002/BD101; 4J002/BG021; 4J002/BG041; 4J002/CB001; 4J002/CF051; 4J002/CF071; 4J002/CG001; 4J002/CH041; 4J002/CH071; 4J002/CH091; 4J002/CK021; 4J002/CM041; 4J002/CN011; 4J002/CP031; 4J002/EV266; 4J002/FD116; 4J002/GQ02; 5G301/CA08; 5G301/CA30; 5G301/CD10; 5G301/DA17; 5G301/DA42; 5G301/DD05

OS MARPAT 144:182261
GI

/ Structure 51 in file .gra /

AB A conductive agent contains an ionic conductor of cyclic perfluoroalkylene disulfonimide (I), where n = 2 - 8 and X = quaternary onium cation. Optionally, the agent may be added to a thermoplastic resin or rubber. A conductive resin compn. contg. the above agent is also described.
ST ion conductor perfluoroalkylene sulfonimide
IT Ionic conductors
(conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)
IT Acrylic polymers, uses
Acrylic rubber
Epichlorohydrin rubber
Epoxy resins, uses
Nitrile rubber, uses
Polyamides, uses
Polyesters, uses
Polymer blends
Polyurethanes, uses
Silicone rubber, uses
Styrene-butadiene rubber, uses
Urethane rubber, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)
IT Imides
Sulfonic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(sulfonimides, perfluoroalkylene; conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)

IT Plastics, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(thermoplastics; conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)
IT 9002-86-2, Polyvinyl chloride ***689282-66-4*** ***874807-18-8*** ***874807-19-9*** ***874807-20-2*** ***874807-21-3*** ***874807-22-4*** ***874807-23-5*** ***874807-24-6***
RL: TEM (Technical or engineered material use); USES (Uses)
(conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)
IT 9003-18-3
RL: TEM (Technical or engineered material use); USES (Uses)
(nitrile rubber; conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)
IT 9003-55-8
RL: TEM (Technical or engineered material use); USES (Uses)
(styrene-butadiene rubber; conductive agent of cyclic perfluoroalkylene sulfonimide and conductive resin compn.)

L14 ANSWER 94 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:75337 CAPLUS <<LOGINID::20080627>>
DN 144:160276
ED Entered STN: 26 Jan 2006
TI Resist composition containing specific acid generator and method of forming resist pattern by immersion photolithography
IN Tsuji, Hiromitsu; Utsumi, Yoshiyuki
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM G03F007-004
ICS G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006008914	A1	20060126	WO 2005-JP11737	20050627
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006058842	A	20060302	JP 2005-52032	20050225
	TW 279646	B	20070421	TW 2005-94121941	20050629
PRAI	JP 2004-215404	A	20040723		
	JP 2005-52032	A	20050225		

CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2006008914	ICM	G03F007-004
	ICS	G03F007-039; H01L021-027
	IPCI	G03F0007-004 [ICM,7]; G03F0007-039 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	ECLA	G03F007/004D; S03F; S03F
JP 2006058842	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	FTERM	2H025/AA00; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17
TW 279646	IPCI	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; H01L0021-02 [I,C]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; S03F; S03F

OS MARPAT 144:160276

AB The invention relates to a resist compn. contg. an acid generator ingredient (B) which is either an onium salt type acid generator (B1) represented by the following general formula (R11)(R12)(R13)S+ Z-(wherein R11 to R13 each independently represents aryl or alkyl, provided that at least one of R11 to R13 represents aryl in which at least one hydrogen atom has been replaced with alkyl; and Z- represents an anion) or an onium salt type acid generator (B2) having a cyclic-group-contg. anion. The compn. contg. the acid generator is suitable for immersion photolithog.

ST resist compn immersion photolithog photoacid generator

IT Photolithography
(immersion; resist compn. and method of forming resist pattern by immersion photolithog.)

IT Photoresists
(resist compn. and method of forming resist pattern by immersion photolithog.)

IT 241806-75-7 ***808752-25-2*** 873867-81-3
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator for immersion photolithog.)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; JP 2001290276 A 2001 CAPLUS
(2) Fuji Photo Film Co Ltd; JP 2003255542 A 2003 CAPLUS
(3) Fuji Photo Film Co Ltd; JP 2003307850 A 2003 CAPLUS
(4) Fuji Photo Film Co Ltd; US 20040009429 A1 2003
(5) Fuji Photo Film Co Ltd; JP 2004177486 A 2004 CAPLUS
(6) Jsr Corp; JP 2000327654 A 2000 CAPLUS
(7) Nikon Corp; WO 2004053956 A1 2004 CAPLUS
(8) Nikon Corp; JP 2004207711 A 2004 CAPLUS

L14 ANSWER 95 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1240302 CAPLUS <<LOGINID::20080627>>

DN 143:479357

ED Entered STN: 24 Nov 2005

TI Near IR-absorbing dyes with good heat and hydrolysis resistance and near IR filters therewith

IN Tamura, Masaaki; Yamaguchi, Hiroshi; Yamamoto, Hideo

PA Japan Carlit Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
IC ICM C09B053-00
ICS C09K003-00; G02B005-22
CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 73

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005325292	A	20051124	JP 2004-146317	20040517

PRAI JP 2004-146317 20040517

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005325292	ICM	C09B053-00
	ICS	C09K003-00; G02B005-22
	IPCI	C09B0053-00 [ICM,7]; C09K0003-00 [ICS,7]; G02B0005-22 [ICS,7]
	FTERM	2H048/CA04; 2H048/CA12; 2H048/CA19; 2H048/CA26

OS MARPAT 143:479357
GI

/ Structure 52 in file .gra /

AB The dyes contain diimonium salts I [R1-R8 = (halo)alkyl, alkylene, cyanoalkyl, OH, (alkyl)sulfonato, nitro, amino, alkoxy, aryl, halo, phenylaklyl; A- = anion]. Near-IR filters contg. the dyes are useful for plasma display panels, automobile windows, lenses, etc. Thus, 63 parts 1-iodo-4,4,4-trifluorobutane and 10 parts N,N,N',N'-tetrakis(p-aminophenyl)-p-phenylenediamine were reacted in DMF at 120.degree. in the presence of K2CO3 to give N,N,N',N'-tetrakis[p-di(4,4,4-trifluorobutyl)aminophenyl]-p-phenylenediamine, which was reacted with Ag hexafluoroantimonate to give a dye. A coating contg. the dye showed absorption max. 1048 nm and molar absorption coeff. .epsilon. 104000 L/(cm.cntdot.mol).

ST near IR absorbing diimonium salt dye; heat hydrolysis resistant near IR absorbing dye

IT Dyes
(IR-absorbing, near IR, diimonium salt-type; diimonium salt-type near IR-absorbing dyes with good heat and moisture resistance for near-IR filters)

IT Optical filters
(near-IR; diimonium salt-type near IR-absorbing dyes with good heat and moisture resistance for near-IR filters)

IT 353-83-3, 1-Iodo-2,2,2-trifluoroethane 423-39-2, 1-Iodoperfluorobutane 461-17-6, 1-Iodo-4,4,4-trifluorobutane 3283-07-6, N,N,N',N'-Tetrakis(p-aminophenyl)-p-phenylenediamine 26042-64-8, Silver hexafluoroantimonate 84331-53-3, Cyclic 1,3-perfluoropropanedisulfonimide silver salt 189114-61-2, Silver bis(trifluoromethylsulfonyl)amide 869548-90-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(diimonium salt-type near IR-absorbing dyes with good heat and moisture resistance for near-IR filters)

IT 159253-04-0P, N,N,N',N'-Tetrakis[p-di(2,2,2-trifluoroethyl)aminophenyl]-p-phenylenediimonium bis(hexafluoroantimonate) 869548-76-5P,

N,N,N',N'-Tetrakis[p-di(4,4,4-trifluorobutyl)aminophenyl]-p-phenylenediimonium bis(hexafluoroantimonate) 869548-78-7P, N,N,N',N'-Tetrakis[p-di(perfluorobutyl)aminophenyl]-p-phenylenediimonium bis(hexafluoroantimonate) 869548-80-1P 869548-81-2P, N,N,N',N'-Tetrakis[p-di(4,4,4-trifluorobutyl)aminophenyl]-p-phenylenediimonium bis[bis(trifluoromethanesulfonyl)imidate] 869548-82-3P, N,N,N',N'-Tetrakis[p-di(2,2,2-trifluoroethyl)aminophenyl]-p-phenylenediimonium bis[bis(trifluoromethanesulfonyl)imidate] 869548-83-4P, N,N,N',N'-Tetrakis[p-di(perfluorobutyl)aminophenyl]-p-phenylenediimonium bis[bis(trifluoromethanesulfonyl)imidate] 869548-84-5P, N,N,N',N'-Tetrakis[p-di(4,4,4-trichlorobutyl)aminophenyl]-p-phenylenediimonium bis[bis(trifluoromethanesulfonyl)imidate]
869548-85-6P , N,N,N',N'-Tetrakis[p-di(4,4,4-trifluorobutyl)aminophenyl]-p-phenylenediimonium bis(cyclic 1,3-perfluoropropanedisulfonimidate) ***869548-86-7P*** , N,N,N',N'-Tetrakis[p-di(2,2,2-trifluoroethyl)aminophenyl]-p-phenylenediimonium bis(cyclic 1,3-perfluoropropanedisulfonimidate)
869548-87-8P , N,N,N',N'-Tetrakis[p-di(perfluorobutyl)aminophenyl]-p-phenylenediimonium bis(cyclic 1,3-perfluoropropanedisulfonimidate)
869548-88-9P , N,N,N',N'-Tetrakis[p-di(4,4,4-trichlorobutyl)aminophenyl]-p-phenylenediimonium bis(cyclic 1,3-perfluoropropanedisulfonimidate)
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dyes; diimonium salt-type near IR-absorbing dyes with good heat and moisture resistance for near-IR filters)

IT 869548-89-0P, N,N,N',N'-Tetrakis[p-di(4,4,4-trifluorobutyl)aminophenyl]-p-phenylenediamine
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(intermediates; diimonium salt-type near IR-absorbing dyes with good heat and moisture resistance for near-IR filters)

L14 ANSWER 96 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1239721 CAPLUS <<LOGINID::20080627>>
DN 143:485829
ED Entered STN: 24 Nov 2005
TI Chemically-amplified positive-working photosensitive compositions, polymers and their monomers for the compositions, and method for their patterning
IN Kodama, Kunihiko; Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-039
ICS G03F007-004; G03F007-20; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005326609	A	20051124	JP 2004-144470	20040514
PRAI JP 2004-144470		20040514		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005326609	ICM	G03F007-039
	ICS	G03F007-004; G03F007-20; H01L021-027
	IPCI	G03F0007-039 [ICM,7]; G03F0007-004 [ICS,7]; G03F0007-20 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	FTERM	2H025/AA02; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC06; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CC20; 2H097/LA10; 2H097/LA11; 2H097/LA20

OS MARPAT 143:485829

GI

/ Structure 53 in file .gra /

AB The compns. contain (A) polymers with structural repeating units OL1(X1Lc1)m (L1 = single or multi-ringed alicyclic hydrocarbon of valence (m + 1); X1 = single bond, bivalent connecting group; Lc1 = group having lactone structure; m = 1, 2) that increase soly. in alk. developing agents by acids and (B) compds. generating acid on irradn. with actinic light or radiation. The compns. may also contain (D) dissoln. inhibitors having mol. wt. .ltoreq.3000 which decomp. by acids and showing soly. increase in alk. developing agents. Also claimed are polymers having structural repeating unit I (Ra1 = H, alkyl, CH2ORa2; Ra2 = H, alkyl, acyl) polymerizable compd. II, and method for patterning films formed from the compns. Patterns with high resoln. and excellent line edge roughness can be formed.

ST chem amplified pos working photoresist compn; lactone alicyclic acrylate pos working resist patterning

IT Positive photoresists
(chem.-amplified; lactone-contg. monomers and their polymers for chem.-amplified pos.-working photoresist compns.)

IT 169965-90-6, tert-Butyl lithocholate
RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(dissoln. inhibitor; lactone-contg. monomers and their polymers for chem.-amplified pos.-working photoresist compns.)

IT 869381-97-5P 869381-99-7P 869382-01-4P 869382-02-5P 869382-04-7P 869382-06-9P 869382-08-1P 869382-10-5P 869382-12-7P 869382-14-9P 869382-16-1P 869382-17-2P 869485-09-6P 869485-11-0P
RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(lactone-contg. monomers and their polymers for chem.-amplified pos.-working photoresist compns.)

IT 869485-08-5P
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(lactone-contg. monomers and their polymers for chem.-amplified pos.-working photoresist compns.)

IT 5061-21-2, .alpha.-Bromo-.gamma.-butyrolactone 195398-48-2
RL: RCT (Reactant); RACT (Reactant or reagent)

(lactone-contg. monomers and their polymers for chem.-amplified pos.-working photoresist compns.)

IT 144089-15-6 144317-44-2 209482-18-8 241806-75-7 284474-28-8
389859-76-1 425670-64-0 474510-73-1 506445-11-0 680200-03-7
808752-25-2 852245-69-3 852572-09-9
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(photoacid generator; lactone-contg. monomers and their polymers for chem.-amplified pos.-working photoresist compns.)

L14 ANSWER 97 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1176454 CAPLUS <<LOGINID::20080627>>
DN 143:449373
ED Entered STN: 06 Nov 2005
TI Positive resist composition and patterning method
IN Iwato, Kaoru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-004
ICS H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005309408	A	20051104	JP 2005-83425	20050323
KR 2006044452	A	20060516	KR 2005-22914	20050319
PRAI JP 2004-84285	A	20040323		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005309408	ICM	G03F007-004
	ICS	H01L021-027
	IPCI	G03F0007-004 [ICM,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	FTERM	2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB03; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB14; 2H025/CB41; 2H025/CB45; 2H025/FA12
KR 2006044452	IPCI	G03F0007-004 [I,A]

OS MARPAT 143:449373
AB Title resist compn. is characterized by contg. compd. ArC(O)C(R1)(R2)S+(Y1)(Y2) X- [Ar = aryl; R1, R2 = H, alkyl, cycloalkyl, aryl, ring system; Y1, Y2 = alkyl, cycloalkyl, aryl, ring system; X = R3SO2NSO2R4, R5SO2C(SO2R6)SO2R7; R3-7 = aliph. hydrocarbyl, ring system] as acid or radical generator. Patterning process using the resist compn. is also claimed.
ST pos resist acid generator
IT Fluoropolymers, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and patterning method)
IT Resists

(pos.-working; pos. resist compn. and patterning method)

IT 250378-10-0P 289623-64-9P 312620-54-5P 366808-82-4P 391232-36-3P
391613-77-7P 398140-38-0P 398140-43-7P 398140-45-9P 398140-57-3P
398140-59-5P 398140-68-6P 398140-77-7P 398140-80-2P 482609-97-2P
521303-15-1P 521303-16-2P 524699-47-6P 574735-94-7P 610300-93-1P
610300-94-2P 610300-95-3P 677351-20-1P 868610-41-7P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. resist compn. and patterning method)

IT 66003-78-9 133710-62-0 209482-18-8 241806-75-7 347193-28-6
389859-76-1 398141-23-6 425670-64-0 460731-26-4 ***868610-05-3***
868610-06-4 ***868610-07-5*** ***868610-09-7***
868610-11-1 ***868610-12-2*** ***868610-14-4***
868610-15-5 ***868610-17-7*** 868610-18-8 868610-20-2
868610-21-3 868610-22-4 868610-23-5 868610-25-7 868610-27-9
868610-28-0 868610-29-1 868610-30-4 868610-31-5 868610-32-6
868610-33-7 868610-34-8 868610-35-9 868610-36-0 868610-37-1
868610-39-3
RL: MOA (Modifier or additive use); USES (Uses)
(pos. resist compn. and patterning method)

IT 249743-11-1 370866-39-0 607710-65-6 607710-67-8 615278-35-8
848408-51-5 848408-52-6 868613-73-4 868613-75-6
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and patterning method)

L14 ANSWER 98 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1175817 CAPLUS <<LOGINID::20080627>>
DN 143:449371
ED Entered STN: 06 Nov 2005
TI Positive photoresist composition for immersion exposure and patterning method
IN Kanda, Hiromi; Kanna, Shinichi; Inabe, Haruki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-039
ICS C08F020-12; G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005309376	A	20051104	JP 2005-713	20050105
PRAI JP 2004-90354	A	20040325		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005309376	ICM	G03F007-039
	ICS	C08F020-12; G03F007-004; H01L021-027
	IPCI	G03F0007-039 [ICM,7]; C08F0020-12 [ICS,7]; C08F0020-00 [ICS,7,C*]; G03F0007-004 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AB17; 2H025/AC04;

2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00;
2H025/CC03; 2H025/CC04; 2H025/CC20; 2H025/FA12;
4J100/AK32Q; 4J100/AK47Q; 4J100/AL08P; 4J100/AL08Q;
4J100/AR09P; 4J100/AR11P; 4J100/AR32P; 4J100/BA02Q;
4J100/BA03P; 4J100/BA03Q; 4J100/BA05P; 4J100/BA10P;
4J100/BA11P; 4J100/BA11Q; 4J100/BA15P; 4J100/BA16P;
4J100/BA22Q; 4J100/BA34P; 4J100/BA40P; 4J100/BA51P;
4J100/BA58Q; 4J100/BB01P; 4J100/BB18Q; 4J100/BC02P;
4J100/BC04P; 4J100/BC04Q; 4J100/BC07Q; 4J100/BC09P;
4J100/BC12P; 4J100/BC23P; 4J100/BC53P; 4J100/BC53Q;
4J100/CA04; 4J100/CA05; 4J100/CA06; 4J100/DA01;
4J100/DA04; 4J100/JA38

AB The compn. contains (A) a resin with mono- or poly-alicyclic hydrocarbon structure, whose soly. to an alk. developer increases by the action of an acid, (B) an actinic ray- or radiation-sensitive acid generator, (C) N compd. without OH group, and (D) a solvent. Pattern is formed by forming the resist layer, immersion exposing, and developing. Deterioration of resist pattern and scum generation are prevented between exposure process and post exposure baking.

ST pos photoresist immersion exposure nitrogen compd alicyclic polymer

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(KP 341, Troysol S 366, surfactant; pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT Surfactants
(fluorosurfactants; pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT Surfactants
(nonionic; pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT Positive photoresists
(pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT 19600-49-8 66003-78-9 138529-81-4 144089-15-6 144317-44-2
177034-80-9 284474-28-8 347193-29-7 389859-76-1 ***808752-25-2***
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT 482609-97-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT 148-87-8 484-47-9, 2,4,5-Triphenylimidazole 613-29-6, N,N-Dibutylaniline 1116-76-3, Trioctylamine 1672-63-5 2217-07-4, N,N-Dipropylaniline 3001-72-7, 1,5-Diazabicyclo[4.3.0]-5-nonene 24544-04-5, 2,6-Diisopropylaniline 30175-08-7 70384-51-9, Tris-2-[2-methoxy(ethoxy)]ethylamine
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT 195000-69-2 258879-87-7 258879-89-9 391613-69-7 398140-80-2
524699-47-6 610300-93-1 726175-43-5 848134-81-6 848408-36-6
848408-37-7 848408-38-8 848408-39-9 848408-40-2 848408-41-3

848408-42-4 848413-54-7 867197-83-9 867197-84-0 867212-61-1
867212-62-2
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

IT 137462-24-9, Megafac F 176 216679-67-3, Megafac R 08 868612-03-7, PF 656 868612-04-8, PF 6320
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(surfactant; pos. photoresist compn. contg. nitrogen compd. and resin with alicyclic structure for immersion exposure)

L14 ANSWER 99 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1155388 CAPLUS <<LOGINID::20080627>>
DN 143:413517
ED Entered STN: 28 Oct 2005
TI Photosensitive composition, compound used in the same, and patterning method using the same
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 69 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM G03C001-492
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20050238992	A1	20051027	US 2005-108798	20050419
US 7323286	B2	20080129		
JP 2005308969	A	20051104	JP 2004-124124	20040420
EP 1591832	A2	20051102	EP 2005-8617	20050420
EP 1591832	A3	20051116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
KR 2006047247	A	20060518	KR 2005-32609	20050420
PRAI JP 2004-124124	A	20040420		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20050238992	ICM	G03C001-492
	INCL	430270100
	IPCI	G03F0007-004 [I,A]; G03F0007-30 [I,A]
	IPCR	C07D0207-00 [I,C*]; C07D0207-48 [I,A]; C07D0209-00 [I,C*]; C07D0209-30 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-038 [N,C*]; G03F0007-038 [N,A]; G03F0007-039 [N,C*]; G03F0007-039 [N,A]; G03F0007-075 [N,C*]; G03F0007-075 [N,A]; G03F0007-20 [N,C*]; G03F0007-20 [N,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	NCL	430/270.100; 430/326.000; 430/905.000; 430/910.000
	ECLA	G03F007/004D
JP 2005308969	IPCI	G03F0007-004 [ICM,7]; H01L0021-027 [ICS,7]; H01L0021-02

[ICS,7,C*]

FTERM 2H025/AA01; 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/FA17

EP 1591832 IPCI G03F0007-004 [ICM,7]; G03F0007-038 [ICS,7]; G03F0007-039 [ICS,7]; G03F0007-075 [ICS,7]; C07D0207-48 [ICS,7]; C07D0207-00 [ICS,7,C*]; C07D0209-30 [ICS,7]; C07D0209-00 [ICS,7,C*]

IPCR C07D0207-00 [I,C*]; C07D0207-48 [I,A]; C07D0209-00 [I,C*]; C07D0209-30 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-038 [N,C*]; G03F0007-038 [N,A]; G03F0007-039 [N,C*]; G03F0007-039 [N,A]; G03F0007-075 [N,C*]; G03F0007-075 [N,A]; G03F0007-20 [N,C*]; G03F0007-20 [N,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]

ECLA G03F007/004D

KR 2006047247 IPCI G03F0007-004 [I,A]; G03F0007-20 [I,A]

ECLA G03F007/004D

OS MARPAT 143:413517

AB A photosensitive compn. comprises a sulfonium salt (Y1Y2Y3S+)nX-n [Y1, Y2, Y3 = N-contg. heteroaryl group, alkyl group, cycloalkyl group, aryl group, an alkenyl group; .gtoreq.1 of Y1, Y2, Y3 represents a N-contg. heteroaryl group, and at least 2 of Y1, Y2, Y3 may combine with each other to form a ring; Xn- = n-valent nonnucleophilic anion; and n = 1-3]. The compn. has excellent image-forming ability and can be used in immersion exposure.

ST photosensitive patterning sulfonium salt

IT Integrated circuits
Photoimaging materials
Photoresists
(photosensitive compn., compd. used in same, and patterning method using same)

IT Polysiloxanes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(surfactant; photosensitive compn., compd. used in same, and patterning method using same)

IT 66003-78-9, Triphenylsulfonium triflate 138529-81-4 138529-84-7 177034-80-9 197447-16-8 209482-18-8 227199-92-0 300374-81-6 301664-71-1 347193-29-7 398141-17-8 425670-64-0 524959-18-0 541547-03-9 676502-24-2 680200-03-7 852572-09-9 867373-20-4 867373-21-5 867373-22-6 867373-24-8 867373-26-0 ***867373-27-1*** 867373-29-3 867373-31-7 867373-32-8 867373-34-0 867373-35-1 867373-36-2 867373-37-3 867373-38-4 867373-40-8 867373-41-9 867373-42-0 867373-43-1
RL: NUU (Other use, unclassified); USES (Uses)
(acid-generator; photosensitive compn., compd. used in same, and patterning method using same)

IT 867373-15-7P 867373-16-8P 867373-18-0P
RL: NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(acid-generator; photosensitive compn., compd. used in same, and patterning method using same)

IT 120-07-0, N-Phenyldiethanolamine 484-47-9, 2,4,5-Triphenylimidazole 621-77-2, Tripentylamine 1672-63-5, 4-Hydroxyantipyrine 2052-49-5, Tetrabutylammonium hydroxide 3040-44-6, 1-Piperidineethanol 7560-83-0, Dicyclohexylmethylamine 19600-49-8, Triphenylsulfonium acetate 24544-04-5, 2,6-Diisopropylaniline 70384-51-9

RL: NUU (Other use, unclassified); USES (Uses)
(basic compd.; photosensitive compn., compd. used in same, and patterning method using same)

IT 3089-11-0 4356-60-9 162846-57-3 162846-59-5 185502-14-1
RL: NUU (Other use, unclassified); USES (Uses)
(crosslinking agent; photosensitive compn., compd. used in same, and patterning method using same)

IT 24979-69-9 24979-70-2 129674-22-2 158593-28-3 177034-75-2
185405-14-5 200808-68-0 249743-11-1 250378-10-0 288620-13-3
289623-64-9 312620-54-5 321164-59-4 325143-37-1 325143-38-2
345212-27-3 359635-35-1 366808-82-4 372968-15-5 391232-36-3
398140-43-7 482609-97-2 524699-47-6 610300-92-0 610300-93-1
610300-94-2 610300-96-4 610301-50-3 615278-35-8 845795-93-9
848408-51-5 848408-52-6 862261-72-1 867373-45-3 867373-46-4
867373-47-5 867373-48-6
RL: NUU (Other use, unclassified); USES (Uses)
(photosensitive compn., compd. used in same, and patterning method using same)

IT 120-72-9, Indole, reactions 603-76-9, 1-Methylindole 945-51-7, Diphenyl sulfoxide 13755-29-8, Sodium tetrafluoroborate 29420-49-3, Potassium nonafluorobutanesulfonate 169283-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(photosensitive compn., compd. used in same, and patterning method using same)

IT 867373-14-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photosensitive compn., compd. used in same, and patterning method using same)

IT 137462-24-9, Megafac F 176 216679-67-3, Megafac R 08
RL: NUU (Other use, unclassified); USES (Uses)
(surfactant; photosensitive compn., compd. used in same, and patterning method using same)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; 1975, P59
(2) Anon; FR 2285423 A1 1976 CAPLUS
(3) Anon; JP 1048814 1998
(4) Anon; JP 2000275845 2000 CAPLUS
(5) Anon; WO 0219033 A2 2002 CAPLUS
(6) Anon; WO 03003120 A1 2003 CAPLUS
(7) Anon; WO 03064387 A2 2003 CAPLUS
(8) Anon; JP 2003302754 2003 CAPLUS
(9) Anon; EP 1406122 A2 2004 CAPLUS
(10) Bellesia, G; J Heterocyclic Chem 1993, V30, P617
(11) Hartke, K; Heterocycles 1986, V24(9), P2399 CAPLUS
(12) Hartke, K; Tetrahedron 1988, V44(11), P3261 CAPLUS
(13) Kodama; US 20050095532 A1 2005
(14) Kodama; US 20060040203 A1 2006
(15) Shevchenko, N; Chemistry of Heterocyclic Compounds 2000, V36(2), P137 CAPLUS
(16) Srogl, J; J Am Chem Soc 1997, V119, P12376 CAPLUS
(17) Wada; US 6395340 B1 2002
(18) Wendebourg, H; Synthesis 1989, 4, P329 CAPLUS

L14 ANSWER 100 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1048423 CAPLUS <<LOGINID::20080627>>

DN 143:336291
ED Entered STN: 30 Sep 2005
TI Positive photoresist composition for use with electron beam, EUV light or x ray, and pattern formation method using the same
IN Mizutani, Kazuyoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 73 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G03F007-039
ICS G03F007-004
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1580601	A1	20050928	EP 2005-6536	20050324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005275283	A	20051006	JP 2004-92091	20040326
KR 2006044803	A	20060516	KR 2005-25227	20050326
US 20050221224	A1	20051006	US 2005-90864	20050328
US 7344821	B2	20080318		
PRAI JP 2004-92091	A	20040326		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1580601	ICM	G03F007-039
	ICS	G03F007-004
	IPCI	G03F0007-039 [ICM,7]; G03F0007-004 [ICS,7]
	IPCR	G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-033 [I,C*]; G03F0007-033 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	ECLA	G03F007/039C1S; G03F007/004F
JP 2005275283	IPCR	G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]
KR 2006044803	IPCI	G03F0007-039 [I,A]
	ECLA	G03F007/039C1S; G03F007/004F
US 20050221224	IPCI	G03F0007-039 [I,A]; G03F0007-30 [I,A]
	IPCR	G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-033 [I,C*]; G03F0007-033 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	NCL	430/270.100; 430/296.000; 430/326.000; 430/914.000; 430/921.000; 430/966.000; 430/967.000

AB A pos. resist compn. for use with an electron beam, an EUV light or an X ray, the pos. resist compn. comprises: (A) at least one compd. that generates an acid upon treatment with one of an actinic ray and radiation; and (B) a resin that increases a soly. of the resin (B) in an alk. developer by an action of an acid, wherein the resin (B) comprises a repeating unit having an alicyclic group connected with a fluorine-substituted alc. residue; and a pattern formation method using the compn.

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ST   pos photoresist compn electron beam EUV light x ray
IT   Positive photoresists
        (pos. photoresist compn. for use with electron beam, EUV light or x
        ray, and pattern formation)
IT   1511-10-0P   19600-49-8P   144089-15-6P   144317-44-2P   251463-24-8P
     270563-93-4P   270563-96-7P   335199-99-0P   389859-76-1P   454471-05-7P
     509097-30-7P   754191-59-8P   ***862261-51-6P***     865370-34-9P
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (photoacid generator; pos. photoresist compn. contg.)
IT   865370-69-0P   865370-70-3P   865370-71-4P   865370-72-5P   865370-73-6P
     865370-74-7P   865370-75-8P   865370-76-9P   865370-77-0P   865370-79-2P
     865370-80-5P   865370-82-7P   865370-83-8P
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (prepn. or polymer for pos. photoresist compn.)
RE.CNT  3     THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fuji Photo Film Co Ltd; EP 1367440 A 2003 CAPLUS
(2) Fuji Photo Film Co Ltd; EP 1462858 A 2004 CAPLUS
(3) Vohra, V; PROCEEDINGS OF THE SPIE 2002, V4690, P84 CAPLUS

L14  ANSWER 101 OF 116  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2005:1026115  CAPLUS <<LOGINID::20080627>>
DN   143:337861
ED   Entered STN:  23 Sep 2005
TI   Thermal-resistant solid electrolytic capacitors and manufacturing
     capacitors thereof
IN   Yamaguchi, Hiroshi; Tamura, Masaaki; Yamamoto, Hideo
PA   Japan Carlit Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 10 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
IC   ICM  H01G009-028
     ICS  H01G009-00
CC   76-10 (Electric Phenomena)
     Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    -------------------    --------
PI   JP 2005259808        A     20050922    JP 2004-66041          20040309
PRAI JP 2004-66041                20040309
CLASS
 PATENT NO.      CLASS  PATENT FAMILY CLASSIFICATION CODES
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 JP 2005259808   ICM    H01G009-028
                 ICS    H01G009-00
                 IPCI   H01G0009-028 [ICM,7]; H01G0009-022 [ICM,7,C*];
                        H01G0009-00 [ICS,7]
                 IPCR   H01G0009-00 [I,A]; H01G0009-00 [I,C*]; H01G0009-022
                        [I,C*]; H01G0009-028 [I,A]
GI


/ Structure 54 in file .gra /
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AB The title electrolytic capacitor comprises a dielec. oxide-coated valve metal, a solid electrolyte provided on the dielec. oxide layer, and a cathode layer formed on the electrolyte, wherein (1) the electrolyte is a conductive polymer contg. cyclic perfluoroalkylenesulfoneimide anion (I: n = 2-8 int.) as a dopant and (2) the conductive polymer is polypyrrole and/or poly(3,4-ethylenedioxythiophene). The polymer electrolyte gives the capacitors increased thermal resistance and elec. characteristics.

ST perfluoroalkylenesulfoneimide anion dopant polypyrrole conductor electrolyte capacitor thermal resistance; polyethylenedioxythiophene conductor perfluoroalkylenesulfoneimide anion dopant electrolyte capacitor thermal resistance

IT Dopants
(1,3-disulfonehexafluoropropyleneimide anion; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT Anions
(1,3-disulfonehexafluoropropyleneimide; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT Conducting polymers
(electrolytes; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT Electric resistance
(equiv.-series; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT Electrolytic capacitors
(solid; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT Dielectric loss
Electric capacitance
Polymer electrolytes
Thermal resistance
(thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT Metals, properties
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(valve, dielec. oxide coated; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT 19090-60-9, Ammonium adipate
RL: RCT (Reactant); RACT (Reactant or reagent)
(anodization agent; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT 30604-81-0, Polypyrrole 126213-51-2, Poly(3,4-ethylenedioxythiophene)
RL: PRP (Properties)
(conductive polymer, contg. imide anion; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT 146063-77-6
RL: MOA (Modifier or additive use); USES (Uses)
(dopant; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT ***864962-07-2***
RL: RCT (Reactant); RACT (Reactant or reagent)
(doping agent; thermal-resistant solid electrolytic capacitors and manufg. capacitors thereof)

IT 7429-90-5, Aluminum, properties
RL: DEV (Device component use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(surface anodization of; thermal-resistant solid electrolytic

capacitors and manufg. capacitors thereof)

L14 ANSWER 102 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:954632 CAPLUS <<LOGINID::20080627>>
DN 143:413410
ED Entered STN: 01 Sep 2005
TI Development of fast-photospeed chemically amplified resist in extreme ultraviolet lithography
AU Watanabe, Takeo; Hada, Hideo; Lee, Seung Yoon; Kinoshita, Hiroo; Hamamoto, Kazuhiro; Komano, Hiroshi
CS Laboratory of Advanced Science and Technology for Industry, University of Hyogo, Hyogo, 678-1205, Japan
SO Japanese Journal of Applied Physics, Part 1: Regular Papers, Brief Communications & Review Papers (2005), 44(7B), 5866-5870
CODEN: JAPNDE
PB Japan Society of Applied Physics
DT Journal
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
AB In a high-annealing type resist system that employs polyhydroxystyrene as a base resin, the authors found that triphenysulfonium cyclo(1,3-perfluoropropanedisulfone)imidate when employed as a photoacid generator (PAG) is more sensitive than triphenysulfonium nonaflate under extreme-UV (EUV) exposure. However, their sensitivities are almost the same under KrF and electron-beam exposures. As results of both outgassing species and FT-IR measurements, the EUV-induced reaction of cyclo(1,3-perfluoropropanedisulfone)imidate employed as an anion of PAG occurred more efficiently than that of nonaflate employed as an anion of PAG. Therefore, the anion of PAG contributes to achieve a fast photospeed under EUV exposure. Furthermore, from the sensitivity curve measurements, it is found that triphenylsulfonium employed as a cation increases the developing rate more than diphenylnaphthylsulfonium employed as a cation of PAG. As a result, the authors have succeeded in developing a fast photospeed chem. amplified resist that has a sensitivity of 1.1 mJ/cm2 and a partial pressure displacement accumulated in the total exposure time between after and before exposures on the order of 10-6 Pa s.
ST chem amplified photoresist extreme UV lithog sulfonium photoacid generator; photoacid generator effect chem amplified photoresist extreme UV lithog
IT Electron beams
(exposure; photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
IT Photoresists
(extreme-UV, chem. amplified; photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
IT IR spectra
Photolysis
(photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
IT UV laser radiation
(vacuum-UV; photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
IT 75-59-2, Tetramethylammonium hydroxide
RL: NUU (Other use, unclassified); USES (Uses)
(developer; photoacid generator effect on photospeed and exposure

characteristics of chem. amplified resist for extreme-UV lithog.)
IT 159296-87-4
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
IT 144317-44-2 ***808752-25-2***
RL: PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(photoacid generator; photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
IT 84540-57-8, Propylene glycol monomethyl ether acetate
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(solvent; photoacid generator effect on photospeed and exposure characteristics of chem. amplified resist for extreme-UV lithog.)
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Hamamoto, K; J Photopolym Sci & Technol 2002, V15, P361 CAPLUS
(2) Hamamoto, K; Photopolym Sci & Technol 2001, V14, P567 CAPLUS
(3) Hashimoto, S; Trans Mater Res Soc Jpn 2001, V26, P783
(4) Ito, H; Dig Tech Papers 1982 Symp VLSI Tech 1982, P86
(5) Ito, H; J Photopolym Sci & Technol 1994, V7, P433 CAPLUS
(6) Ito, H; Polym Eng Sci 1983, V23, P1012 CAPLUS
(7) Kinoshita, H; J Vac Sci & Technol B 1989, V7, P1648 CAPLUS
(8) MaCord, M; Microlithography, Micromachining, and Microfabrication, Microlithography V1, P208
(9) Matsuzawa, N; Proc SPIE 2001, V4343, P151
(10) Watanabe, T; J Synchrotron Rad 1998, V5, P1149 MEDLINE
(11) Watanabe, T; J Vac Sci & Technol B 2000, V18, P2905 CAPLUS
(12) Watanabe, T; J Vac Sci & Technol B 2001, V19, P736 CAPLUS
(13) Watanabe, T; Jpn J Appl Phys 2005, V44, P5556 CAPLUS
(14) Watanabe, T; Photopolym Sci & Technol 2001, V14, P555 CAPLUS
(15) Watanabe, T; SPIE 2000, V3997, P600

L14 ANSWER 103 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:904202 CAPLUS <<LOGINID::20080627>>
DN 143:257059
ED Entered STN: 26 Aug 2005
TI Positive resist composition for immersion exposure and method of pattern formation with the same
IN Kodama, Kunihiko; Kanda, Hiromi
PA Fuji Photo Film Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 65 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM G03C001-492
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050186505	A1	20050825	US 2005-60530	20050218

US 7273690		B2	20070925		
JP 2005266799		A	20050929	JP 2005-41926	20050218
PRAI JP 2004-43990		A	20040220		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20050186505	ICM	G03C001-492
	INCL	430270100
	IPCI	G03F0007-00 [I,A]; G03F0007-004 [I,A]
	IPCR	G03C0001-005 [I,C*]; G03C0001-492 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; G03F0007-20 [I,C*]; G03F0007-20 [I,A]
	NCL	430/270.100; 430/311.000
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C; G03F007/039C1S; G03F007/20F
JP 2005266799	IPCI	G03F0007-039 [ICM,7]; G03F0007-004 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB15; 2H025/AB16; 2H025/AB17; 2H025/AC04; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB41; 2H025/FA03

AB A pos. resist compn. for immersion exposure which comprises (A) a resin which enhances its soly. in an alk. developer by the action of an acid and (B) at least one compd. which generates an acid upon irradn. with an actinic ray or a radiation, the compd. being selected from the following (Ba) to (Bc): (Ba) a sulfonium salt compd. having a specific alkyl or cycloalkyl residue in the cation part, (Bb) a sulfonium salt compd. having a specific alkyl or cycloalkyl residue in the cation part, and (Bc) a sulfonium salt compd. having a specific alkyl or cycloalkyl residue in the anion part; and a method of pattern formation with the compn.

ST pos working photoresist resist compn pattern formation acid generator

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(in pos. resist compn. for immersion exposure and method of pattern formation with the same)

IT Photolithography
Positive photoresists
(pos. resist compn. for immersion exposure and method of pattern formation with the same)

IT 144317-44-2 153698-46-5 241806-75-7 241806-76-8 398141-23-6 680200-03-7 830323-85-8 852245-69-3 852572-09-9 ***862261-50-5*** 863024-60-6 863024-62-8 863024-63-9 863024-65-1 863024-66-2 863024-67-3
RL: CAT (Catalyst use); USES (Uses)
(acid generator in pos. resist compn. for immersion exposure and method of pattern formation with the same)

IT 425670-64-0P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(acid generator in pos. resist compn. for immersion exposure and method of pattern formation with the same)

IT 110-89-4, Piperidine, reactions 576-26-1, 2,6-Xylenol 945-51-7, Diphenylsulfoxide 18393-55-0, Triphenylsulfonium 29420-49-3, Potassium

nonafluorobutanesulfonate 36913-91-4, Nonafluorobutanesulfonic anhydride
82727-16-0 753025-62-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(acid generator synthesis; pos. resist compn. for immersion exposure and method of pattern formation with the same)
IT 82727-09-1P 328935-87-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(acid generator synthesis; pos. resist compn. for immersion exposure and method of pattern formation with the same)
IT 862996-88-1P 863024-59-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(acid generator synthesis; pos. resist compn. for immersion exposure and method of pattern formation with the same)
IT 195000-67-0 258879-87-7 391613-69-7 398140-80-2 405509-21-9
482609-97-2 524699-47-6 577995-45-0 726175-43-5 801304-19-8
848408-41-3 848413-53-6 863024-53-7 863024-54-8 863024-55-9
863024-56-0 863024-57-1 863029-53-2
RL: TEM (Technical or engineered material use); USES (Uses)
(alk.-sol. resin in pos. resist compn. for immersion exposure and method of pattern formation with the same)
IT 120-07-0 484-47-9, 2,4,5-Triphenylimidazole 613-29-6, N,N-Dibutylaniline 2217-07-4, N,N-Dipropylaniline 70384-51-9, Tris-2-(2-methoxy(ethoxy))ethylamine 137462-24-9, Megafac F 176 216679-67-3, Megafac R 08 863402-96-4, PF 636 863402-97-5, PF 6520
RL: MOA (Modifier or additive use); USES (Uses)
(in pos. resist compn. for immersion exposure and method of pattern formation with the same)
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; JP 57153433 1982
(2) Anon; JP 7220990 1995
(3) Anon; JP 10303114 1998
(4) Anon; JP 2004233661 A 2004 CAPLUS
(5) Anon; EP 1500977 A1 2005 CAPLUS
(6) Barclay; US 6841331 B2 2005 CAPLUS
(7) Barclay; US 6849381 B2 2005 CAPLUS
(8) Brock; US 6677419 B1 2004 CAPLUS
(9) Choi; US 6897005 B2 2005 CAPLUS
(10) Hasegawa; US 6280898 B1 2001 CAPLUS
(11) Hatakeyama; US 6878501 B2 2005 CAPLUS
(12) Hoffnagle, J; J Vac Sci Technol B 1999, V17(6), P3306 CAPLUS
(13) Kodama; US 20050019689 A1 2005
(14) Krautschik; US 6781670 B2 2004
(15) Lin; US 6788477 B2 2004
(16) Lin, B; Proceedings of SPIE 2002, V4688, P11
(17) Park; US 6268106 B1 2001 CAPLUS
(18) Takanashi; US 4480910 A 1984
(19) Takeda; US 6593056 B2 2003 CAPLUS
(20) Yamamoto; US 20040146802 A1 2004 CAPLUS

L14 ANSWER 104 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:902343 CAPLUS <<LOGINID::20080627>>
DN 143:238687
ED Entered STN: 26 Aug 2005
TI Photosensitive compositions with high sensitivity, resolution, and wide defocus (DOF) latitude, sulfonium salts therefor, and method for

patterning therewith
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 83 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-004
ICS C07C381-12; G03F007-038; G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005227680	A	20050825	JP 2004-38307	20040216
PRAI JP 2004-38307		20040216		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005227680	ICM	G03F007-004
	ICS	C07C381-12; G03F007-038; G03F007-039; H01L021-027
	IPCI	G03F0007-004 [ICM,7]; C07C0381-12 [ICS,7]; C07C0381-00 [ICS,7,C*]; G03F0007-038 [ICS,7]; G03F0007-039 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	C07C0381-00 [I,C*]; C07C0381-12 [I,A]; G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-038 [I,A]; G03F0007-038 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	FTERM	2H025/AA00; 2H025/AA01; 2H025/AA02; 2H025/AB14; 2H025/AB15; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB42; 2H025/CC17; 4H006/AA01; 4H006/AA03; 4H006/AB92

OS MARPAT 143:238687
AB The compns. contain (A) sulfonium salts having (ASO2Rx)m1Y1S+[Y2(RxSO2A)m2][Y3(RxSO2A)m3] [Y1-Y3 = org. group; A = (cyclo)alkyl, aryl, aralkyl, camphoryl; Rx = single bond, O, NRy; Ry = H, (cyclo)alkyl; m = 1-3; m1, m2, m3 = 0-3; m1 + m2 + m3 = 1-6]. The compns. may contain (B) resins which can be decompd. by acids to increase alk. soly. or, (D) resins sol. in alk. developers and (E) agents for curing D by acids. In the process, the compns. are formed into films, which are exposed and developed to give patterns.
ST photoresist sensitivity resoln wide defocus latitude; sulfonyl sulfonium salt photoacid generator photoresist; sulfonium salt neg pos photoresist photolithog
IT Fluoropolymers, processes
Silsesquioxanes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(acrylic; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)
IT Negative photoresists
Photolithography
Positive photoresists
(photolithog. using photosensitive compns. contg. sulfonyl-bearing

sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT Fluoropolymers, processes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT Sulfonium compounds
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sulfonyl-contg.; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 3089-11-0 4356-60-9 161679-94-3 162846-57-3 162846-59-5 185502-14-1
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(curing agents; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 328935-87-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(in prepn. of photoacid generators; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 576-26-1, 2,6-Xylenol 945-51-7, Diphenyl sulfoxide 36913-91-4, Nonafluorobutanesulfonic anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of photoacid generators; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 862996-88-1P
RL: CAT (Catalyst use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoacid generators; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 862996-92-7 862996-95-0 862996-98-3 862997-01-1 862997-04-4 862997-07-7 862997-09-9 862997-12-4 862997-14-6 ***862997-16-8*** 862997-18-0 862997-19-1 862997-21-5
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(photoacid generators; photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 158593-28-3 177034-75-2 196709-91-8 200808-68-0 250378-10-0 288620-13-3 289623-64-9 312620-54-5 325143-37-1 325143-38-2 359635-35-1 366808-82-4 370102-83-3 370866-39-0 372968-15-5 391232-36-3 398140-43-7 406702-00-9 459418-30-5 482609-97-2 524699-47-6 607710-65-6 607710-67-8 607710-68-9 607710-69-0 607710-70-3 610300-92-0 610300-93-1 610300-94-2 610300-95-3 615278-35-8 677351-20-1 677351-26-7 848408-51-5 848408-52-6 862261-72-1 862997-26-0 862997-27-1 862997-31-7 862997-34-0 862997-41-9 862997-57-7 862997-60-2

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 848419-28-3P 862997-70-4P 862997-71-5P 862997-72-6P 862997-73-7P 862997-74-8P 862997-75-9P 862997-81-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

IT 24979-69-9 24979-70-2, VP 5000 185405-14-5 321164-59-4 345212-27-3
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(photolithog. using photosensitive compns. contg. sulfonyl-bearing sulfonium compds. as photoacid generators and showing wide defocus latitude)

L14 ANSWER 105 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:822672 CAPLUS <<LOGINID::20080627>>
DN 143:219455
ED Entered STN: 19 Aug 2005
TI Chemically-amplified far-UV positive photoresists and negative photoresists, and their patterning method
IN Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-004
ICS G03F007-038; G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005221721	A	20050818	JP 2004-29068	20040205
US 20050266336	A1	20051201	US 2005-41748	20050125
EP 1566692	A1	20050824	EP 2005-2140	20050202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
PRAI JP 2004-29068	A	20040205		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005221721	ICM	G03F007-004
	ICS	G03F007-038; G03F007-039; H01L021-027
	IPCI	G03F0007-004 [ICM,7]; G03F0007-038 [ICS,7]; G03F0007-039 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-038 [I,A]; G03F0007-038 [I,C*]; G03F0007-039 [I,A];

		G03F0007-039 [I,C*]
	FTERM	2H025/AA03; 2H025/AB16; 2H025/AC04; 2H025/AC08; 2H025/AD01; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB08; 2H025/CB14; 2H025/CB45; 2H025/CC20; 2H025/FA17
US 20050266336	IPCI	G03C0001-492 [ICM,7]; G03C0001-005 [ICM,7,C*]
	IPCR	G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; G03F0007-075 [I,C*]; G03F0007-075 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	NCL	430/270.100
	ECLA	G03F007/004D; G03F007/004F; G03F007/038C; G03F007/039C; G03F007/039C1; G03F007/039C1S; G03F007/075M2
EP 1566692	IPCI	G03F0007-004 [ICM,7]; G03F0007-039 [ICS,7]; G03F0007-038 [ICS,7]
	IPCR	G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; G03F0007-075 [I,C*]; G03F0007-075 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/038C; G03F007/039C; G03F007/039C1; G03F007/039C1S; G03F007/075M2

OS MARPAT 143:219455
GI

/ Structure 55 in file .gra /

AB Both the photoresists contain sulfonium salts or iodonium salts bearing anions of I and II [Y = fluorine-substituted alkylene, R = (cyclo)alkyl] as photoacid generators. The pos. photoresists contain the photoacid generators and polymers increasing soly. in alk. developers upon decompn. with acids. The neg. photoresists contain the photoacid generators, polymers sol. in alk. developers, and crosslinking agents undergoing crosslinking with the polymers upon acid action. The photoresists provide patterns with good edge sharpness.

ST far UV photoresist photoacid generator sulfonium salt; iodonium salt photoacid generator far UV photoresist; pos photoresist photoacid generator sulfonium iodonium salt; neg photoresist photoacid generator sulfonium iodonium salt

IT Negative photoresists
Photolithography
Positive photoresists
(far-UV; chem.-amplified pos.- or neg. far-UV photoresists contg. sulfonium or iodonium salt photoacid generators)

IT 24979-69-9 24979-70-2 185405-14-5 321164-59-4 345212-27-3
RL: TEM (Technical or engineered material use); USES (Uses)
(binder; in chem.-amplified neg. far-UV photoresists contg. sulfonium or iodonium salt photoacid generators)

IT 129674-22-2 177034-75-2 200808-68-0 249743-11-1 250378-10-0
288620-13-3 289623-64-9 312620-54-5 325143-37-1 325143-38-2
359635-35-1 366808-82-4 370102-83-3 370866-39-0 372968-15-5
391232-36-3 398140-43-7 406702-00-9 459418-30-5 482609-97-2
524699-47-6 607357-61-9 607710-65-6 607710-66-7 607710-67-8
607710-68-9 607710-69-0 607710-70-3 610300-92-0 610300-93-1
610300-94-2 610300-95-3 610300-96-4 610301-49-0 610301-50-3
615278-35-8 669088-11-3 845795-93-9 848408-51-5 848408-52-6

862261-72-1 862261-73-2
RL: TEM (Technical or engineered material use); USES (Uses)
(binder; in chem.-amplified pos. far-UV photoresists contg. sulfonium or iodonium salt photoacid generators)

IT 3089-11-0 4356-60-9 161679-94-3 162846-57-3 162846-59-5 185502-14-1
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(crosslinking agent; in chem.-amplified neg. far-UV photoresists contg. sulfonium or iodonium salt photoacid generators)

IT 3744-08-9, Triphenylsulfonium iodide 588668-97-7 753025-62-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of sulfonium salt photoacid generators for chem.-amplified pos.- or neg. far-UV photoresists)

IT ***808752-25-2P*** ***862261-50-5P***
RL: CAT (Catalyst use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoacid generator; in chem.-amplified pos.- or neg. far-UV photoresists contg. sulfonium or iodonium salt photoacid generators)

IT ***862261-51-6*** ***862261-52-7*** ***862261-53-8***
862261-55-0 ***862261-57-2*** ***862261-63-0***
862261-65-2 ***862261-66-3*** ***862261-67-4***
862261-68-5 ***862261-69-6*** 862261-70-9
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; in chem.-amplified pos.- or neg. far-UV photoresists contg. sulfonium or iodonium salt photoacid generators)

L14 ANSWER 106 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:607952 CAPLUS <<LOGINID::20080627>>
DN 144:378928
ED Entered STN: 14 Jul 2005
TI Resist development status for immersion lithography
AU Tsuji, Hiromitsu; Yoshida, Masaaki; Ishizuka, Keita; Hirano, Tomoyuki; Endo, Kotaro; Ohmori, Katsumi
CS Advanced Material Development Division I, Tokyo Ohka Kogyo Co., Ltd., Kanagawa, 253-0114, Japan
SO Journal of Photopolymer Science and Technology (2005), 18(5), 641-645
CODEN: JSTEEW; ISSN: 0914-9244
PB Technical Association of Photopolymers, Japan
DT Journal
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
AB Immersion lithog. has already demonstrated superior performance for next generation semiconductor manufg., while some challenges with contact immersion fluids and resist still remain. There are many interactions to be considered with regards to the solid and liq. interface. Resist elution in particular requires very careful attention since the impact on the lens and fluid supply system in exposure tool could pose a significant risk at the manufg. stage. TOK developed a screening procedure to detect resist elution of ion species down to ppb levels during non and post exposure steps. It was found that the PAG cation elution is affected by mol. wt. and structure while the PAG anion elution was dependent on the mol. structure and mobility. Lithog. performance is discused with the low elution type resist. The alternate application of a cover material on the resist film is also considered as the issue of immersion lithog.

ST immersion lithog photoresist component elution; photoacid generator elution chem amplification resist immersion photolithog

IT Positive photoresists
(chem. amplified; resist component elution in immersion lithog.)

IT Photolithography
(immersion; resist component elution in immersion lithog.)

IT 75-59-2, Tetramethylammonium hydroxide
RL: NUU (Other use, unclassified); USES (Uses)
(developer; resist component elution in immersion lithog.)

IT 66003-78-9, Triphenylsulfonium triflate 144317-44-2, Triphenylsulfonium nonaflate 194999-85-4 241806-75-7 ***808752-25-2*** 873867-81-3
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(photoacid generator; resist component elution in immersion lithog.)

IT 877056-73-0, TArF-P 6111 882521-13-3, TOK-ILP 07
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(resist component elution in immersion lithog.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Hinsberg, W; Proc SPIE 2004, V5376, P25
(2) Ishizuka, K; International Symposium on Immersion and 157nm Lithography in Vancouver 2004
(3) Sato, M; TOK Resist & Material Development Status for Immersion Lithography 2004
(4) Streefkerk, B; Proc SPIE 2004, V5377, P285
(5) Yoshida, M; J Photopolym Sci Technol 2004, V17, P603 CAPLUS

L14 ANSWER 107 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:607924 CAPLUS <<LOGINID::20080627>>
DN 144:400987
ED Entered STN: 14 Jul 2005

TI Outgassing analysis in EUV resist

AU Hada, Hideo; Watanabe, Takeo; Kinoshita, Hiroo; Komano, Hiroji
CS New Technology Development Section, Tokyo Ohka Kogyo Co., Ltd., Kanagawa, 253-0114, Japan

SO Journal of Photopolymer Science and Technology (2005), 18(4), 475-480
CODEN: JSTEEW; ISSN: 0914-9244
PB Technical Association of Photopolymers, Japan
DT Journal
LA English
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 22

AB Tri-phenysulfonium cyclo(1,3-perfluoropropanedisulfone) imidate (TPS-Imidate) as a photo acid generator (PAG) is more sensitive rather than tri-phenysulfonium perfluorobutanesulfonate (TPS-PFBS) by EUV exposure. The authors discussed the outgassing characteristics of discovered the new PAG resist system to better understand the detailed mechanism for obtaining a high sensitivity. As for resist B which employs TPS-PFBS as the PAG was measured larger amt. of isobutene (m/z 56) and benzene (m/z 78) than that of resist A. As for resist C which employs TPS-Imidate as a PAG, the amt. of benzene was larger than that of resist B. Probably resist C shows faster sensitivity due to the high amt. of acid generated by EUV exposure. Resist C contains PAG anion of imidate

derivs., which carried out distinctive photolysis reactions under EUV exposure. This reaction will be expected to generate many acidic species, which has the potential of becoming a catalyst for the de-protecting reaction. This mechanism is very useful for the resist design to obtain a high sensitivity EUV resist.

ST outgassing analysis EUV resist

IT Photomasks (lithographic masks)
Photoresists
(design of; outgassing anal. in EUV resist)

IT Imidic acids
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(esters; outgassing anal. in EUV resist)

IT Degassing
Mass spectra
Photolysis
Reaction mechanism
(outgassing anal. in EUV resist)

IT Acids, reactions
RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); RCT (Reactant); TEM (Technical or engineered material use); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(photo acid generators; outgassing anal. in EUV resist)

IT Photolithography
(submicron UV; outgassing anal. in EUV resist)

IT 144317-44-2 ***808752-25-2***
RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(outgassing anal. in EUV resist)

IT 84540-57-8, Propylene glycol monomethyl ether acetate
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(outgassing anal. in EUV resist)

IT 175284-06-7, Vinylphenol-tert-butyl acrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(outgassing anal. in EUV resist)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; Internatonal technology roadmap of semiconductor 2004 update
(2) Hamamoto, K; J Photopolym Sci Technol 2002, V15, P361 CAPLUS
(3) Hirayama, T; J Photopolym Sci Technol 2004, V17, P435 CAPLUS
(4) Ishida, M; Jpn J Appl Phys 2003, V42, P3913 CAPLUS
(5) Kadota, T; Proc SPIE 2001, V4345, P891 CAPLUS
(6) Kim, J; Chem Lett 2002, V10, P1064
(7) Kim, J; J Mater Chem 2002, V12, P53
(8) Kinoshita, H; J Vac Sci Technol 1989, VB7, P1648
(9) Kozawa, T; 3rd EUVL Symposium 2004
(10) Lee, S; Jpn J Appl Phys, in press 2005
(11) Tully, D; Adv Mater 2000, V12, P1118 CAPLUS
(12) Watanabe, T; J Vac, Sci Technol 2001, VB19, P736
(13) Yueh, W; Proc SPIE 2004, V5376, P434

L14 ANSWER 108 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:547798 CAPLUS <<LOGINID::20080627>>
DN 143:86703
ED Entered STN: 24 Jun 2005
TI Photoresist composition and method for forming resist pattern
IN Tsuji, Hiromitsu; Endo, Kotaro
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM G03F007-004
ICS G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005057284	A1	20050623	WO 2004-JP17719	20041129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005172949	A	20050630	JP 2003-409500	20031208
US 20070148581	A1	20070628	US 2006-581777	20060606
PRAI JP 2003-409500	A	20031208		
WO 2004-JP17719	W	20041129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005057284	ICM	G03F007-004
	ICS	G03F007-039; H01L021-027
	IPCI	G03F0007-004 [ICM,7]; G03F0007-039 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	G03F0007-039 [I,C*]; G03F0007-039 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; G03F007/004F; G03F007/039C1; G03F007/039C1S
JP 2005172949	IPCI	G03F0007-039 [ICM,7]; G03F0007-004 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00; 2H025/CB41; 2H025/CB45; 2H025/CC20; 2H025/DA19; 2H025/FA12
US 20070148581	IPCI	G03C0001-00 [I,A]
	NCL	430/270.100

OS MARPAT 143:86703
GI

/ Structure 56 in file .gra /

AB Disclosed is a photoresist compn. which contains (A) a polymer component comprising an alkali-sol. constitutional unit having an alicyclic group which has both (i) a fluorine atom or a fluorinated alkyl group and (ii) an alc. hydroxyl group, which polymer component has an alkali soly. that is changed by action of an acid, and (B) at least one sulfonium compd. represented by at least the general formula I (X = C2-6-fluoroalkylene; R1-3 = aryl, alkyl) as an acid generator which generates an acid when exposed to light.

ST photoresist compn sulfonium photoacid generator pattern formation photolithog

IT Photolithography
Photoresists
(photoresist compn. and method for forming resist pattern)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compn. and method for forming resist pattern)

IT 69-72-7, Salicylic acid, uses 102-71-6, Triethanol amine, uses
RL: MOA (Modifier or additive use); USES (Uses)
(additive to photoresist compn.; photoresist compn. and method for forming resist pattern)

IT 11105-01-4, Silicon oxynitride
RL: DEV (Device component use); USES (Uses)
(coating layer on Si wafer; photoresist compn. and method for forming resist pattern)

IT ***808752-25-2***
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; photoresist compn. and method for forming resist pattern)

IT 854985-67-4
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compn. and method for forming resist pattern)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Hatakeyama; US 20030194644 A1 2003 CAPLUS
(2) Hatakeyama; JP 20044697 A 2003
(3) Jsr Corp; JP 2003330196 A 2003 CAPLUS
(4) Miya; US 20030194639 A1 2003 CAPLUS
(5) Miya; JP 20044561 A 2003
(6) Shin-Etsu Chemical Co Ltd; JP 2002145962 A 2002 CAPLUS
(7) Shin-Etsu Chemical Co Ltd; JP 2002268226 A 2002 CAPLUS
(8) Shin-Etsu Chemical Co Ltd; US 20030082479 A1 2003
(9) Shin-Etsu Chemical Co Ltd; US 20030194645 A1 2003
(10) Shin-Etsu Chemical Co Ltd; US 20030207201 A1 2003
(11) Shin-Etsu Chemical Co Ltd; JP 2003261529 A 2003 CAPLUS
(12) Shin-Etsu Chemical Co Ltd; JP 2003292547 A 2003 CAPLUS
(13) Shin-Etsu Chemical Co Ltd; JP 200389708 A 2003
(14) Sumitomo Chemical Co Ltd; JP 2003171363 A 2003 CAPLUS
(15) Sumitomo Chemical Co Ltd; JP 2003287884 A 2003 CAPLUS
(16) Tokyo Ohka Kogyo Co Ltd; JP 2000292917 A 2000 CAPLUS
(17) Tokyo Ohka Kogyo Co Ltd; JP 2002357903 A 2002 CAPLUS

(18) Tokyo Ohka Kogyo Co Ltd; JP 2004354954 A 2004 CAPLUS

L14 ANSWER 109 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:540706 CAPLUS <<LOGINID::20080627>>
DN 143:86696
ED Entered STN: 23 Jun 2005
TI Positive resist composition and method for forming resist pattern
IN Hada, Hideo; Takeshita, Masaru; Hayashi, Ryotaro; Matsumaru, Syogo
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM G03F007-039
ICS G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005057287	A1	20050623	WO 2004-JP18189	20041207
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005173468	A	20050630	JP 2003-416584	20031215
	TW 286670	B	20070911	TW 2004-93138146	20041209
PRAI	JP 2003-416584	A	20031215		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005057287	ICM	G03F007-039
	ICS	G03F007-004; H01L021-027
	IPCI	G03F0007-039 [ICM,7]; G03F0007-004 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	C08F0220-00 [I,C*]; C08F0220-18 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-033 [I,C*]; G03F0007-033 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; G03F007/039C1S
JP 2005173468	IPCI	G03F0007-004 [ICM,7]; C08F0220-18 [ICS,7]; C08F0220-00 [ICS,7,C*]; G03F0007-033 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	C08F0220-00 [I,C*]; C08F0220-18 [I,A]; G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-033 [I,A]; G03F0007-033 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	FTERM	2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC08; 2H025/AD03; 2H025/BE07; 2H025/BE10; 2H025/BG00;

2H025/CA48; 2H025/CB14; 2H025/CB41; 2H025/CB45;
2H025/CB55; 2H025/CC20; 2H025/FA12; 4J100/AL08P;
4J100/AL08Q; 4J100/AL08R; 4J100/AL08S; 4J100/BA03R;
4J100/BA20P; 4J100/BC09P; 4J100/BC09R; 4J100/BC09S;
4J100/BC12P; 4J100/BC12S; 4J100/BC53Q; 4J100/CA06;
4J100/DA01; 4J100/JA38

TW 286670 IPCI G03F0007-039 [I,C]; G03F0007-039 [I,A]

IPCR C08F0220-00 [I,C*]; C08F0220-18 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-033 [I,C*]; G03F0007-033 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]

ECLA G03F007/004D; G03F007/039C1S

OS MARPAT 143:86696

GI

/ Structure 57 in file .gra /

AB Disclosed is a pos. resist compn. with excellent resoln. which enables to reduce line-edge roughness. This compn. contains, as a resin component (A) whose alkali soly. is increased by action of an acid, a copolymer having a constitutional unit (a1) derived from a (meth)acrylate contg. a polycyclic group-contg. acid-cleavable dissoln. inhibiting group, a constitutional unit (a2) derived from a (meth)acrylate contg. a lactone-contg. monocyclic or polycyclic group, a constitutional unit (a3) derived from a (meth)acrylate contg. a hydroxyl group-contg. polycyclic group, and a constitutional unit (a4) derived from a (meth)acrylate contg. a polycyclic group-contg. acid-uncleavable dissoln. inhibiting group other than the constitutional units (a2) and (a3); and as an acid generator component (B) which generates an acid when exposed to light, at least one sulfonium compd. represented by the following general formula I or II (X = C2-6-fluoroalkylene; Y, Z = C1-10-fluoroalkyl; R1-3 = aryl, alkyl).

ST pos photoresist compn photoacid generator sulfonium resist pattern formation

IT Photolithography
Positive photoresists
(pos. resist compn. and method for forming resist pattern)

IT 102-71-6, Triethanol amine, uses
RL: MOA (Modifier or additive use); USES (Uses)
(additive to pos. resist compn.; pos. resist compn. and method for forming resist pattern)

IT 144317-44-2 309751-48-2 ***808752-25-2*** 850870-12-1
RL: CAT (Catalyst use); USES (Uses)
(photoacid generator; pos. resist compn. and method for forming resist pattern)

IT 351197-82-5 854933-81-6 854935-50-5
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. resist compn. and method for forming resist pattern)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; JP 2002223001 A 2002 CAPLUS
(2) Fuji Photo Film Co Ltd; US 20030008241 A1 2002
(3) Fuji Photo Film Co Ltd; JP 2003223001 A 2003 CAPLUS
(4) Jsr Corp; JP 200412554 A 2004

(5) Shin-Etsu Chemical Co Ltd; US 20030207201 A1 2003
(6) Shin-Etsu Chemical Co Ltd; JP 2003261529 A 2003 CAPLUS
(7) Sumitomo Chemical Co Ltd; US 20030148211 A1 2003 CAPLUS
(8) Sumitomo Chemical Co Ltd; JP 2003171363 A 2003 CAPLUS
(9) Sumitomo Chemical Co Ltd; JP 2003231673 A 2003 CAPLUS
(10) Sumitomo Chemical Co Ltd; JP 2003287884 A 2003 CAPLUS
(11) Sumitomo Chemical Co Ltd; JP 2004026789 A 2004
(12) Tokyo Ohka Kogyo Co Ltd; WO 03048863 A1 2003 CAPLUS
(13) Tokyo Ohka Kogyo Co Ltd; EP 1452919 A1 2003 CAPLUS

L14 ANSWER 110 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:395616 CAPLUS <<LOGINID::20080627>>
DN 142:454316
ED Entered STN: 09 May 2005
TI Chemically amplified photoresist composition and method for forming resist pattern
IN Hada, Hideo; Takeshita, Masaru; Hayashi, Ryotaro; Matsumaru, Syogo; Hirayama, Taku; Shimizu, Hiroaki
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM G03F007-039
ICS G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005040922	A1	20050506	WO 2004-JP15504	20041020
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005196095	A	20050721	JP 2004-57448	20040302
	KR 801050	B1	20080204	KR 2006-707537	20060419
	US 20070275307	A1	20071129	US 2007-576405	20070430
PRAI	JP 2003-363521	A	20031023		
	JP 2003-410489	A	20031209		
	JP 2004-57448	A	20040302		
	WO 2004-JP15504	W	20041020		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005040922	ICM	G03F007-039
	ICS	G03F007-004; H01L021-027
	IPCI	G03F0007-039 [ICM,7]; G03F0007-004 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]

	IPCR	G03F0007-039 [I,C*]; G03F0007-039 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
	ECLA	G03F007/004D; G03F007/039C1S
JP 2005196095	IPCR	G03F0007-004 [I,A]; G03F0007-004 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
KR 801050	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; H01L0021-02 [I,A]
US 20070275307	IPCI	H01L0021-027 [I,A]; H01L0021-02 [I,C*]; G03F0007-039 [I,A]
	NCL	430/005.000; 430/285.100

OS MARPAT 142:454316
GI

/ Structure 58 in file .gra /

AB Disclosed is a resist compn. which enables to achieve fine resoln., improved line edge roughness and improved depth of focus. This resist compn. contains (A) a resin component whose alkali soly. is changed by the action of an acid, and (B) an acid generator component which generates an acid through exposure. The component (A) is a resin with a mass av. mol. wt. of not more than 8,000 which contains a constitutional unit (a) derived from a (meth)acrylate, and the component (B) contains at least one kind of sulfonium compd. represented by the following general formula I or II(X = C2-6 alkylene contg. F-substituent; Y, Z = C1-10 alkyl contg. F-substituent; R1-3 = aryl, alkyl).

ST photoresist compn resin photoacid generator

IT Photoresists
(chem. amplified photoresist compn. and method for forming resist pattern)

IT Acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(precursor, photoacid-generator; chem. amplified photoresist compn. and method for forming resist pattern)

IT 258879-87-7P 738590-36-8P 850870-10-9P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chem. amplified photoresist compn. and method for forming resist pattern)

IT ***808752-25-2*** 850870-12-1
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator in photoresist compn.)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Alain, V; JP 10-226658 A 1998 CAPLUS
(2) Alain, V; US 6008265 A 1998 CAPLUS
(3) Daicel Chemical Industries Ltd; JP 2002145954 A 2002 CAPLUS
(4) Shin-Etsu Chemical Co Ltd; US 20030207201 A2 2003
(5) Shin-Etsu Chemical Co Ltd; JP 2003261529 A 2003 CAPLUS
(6) Sumitomo Chemical Co Ltd; JP 2000137327 A 2000 CAPLUS
(7) Sumitomo Chemical Co Ltd; EP 982628 A2 2000 CAPLUS
(8) Sumitomo Chemical Co Ltd; US 20010014428 A1 2001
(9) Sumitomo Chemical Co Ltd; JP 2001183836 A 2001 CAPLUS
(10) Sumitomo Chemical Co Ltd; JP 2003287884 A 2003 CAPLUS

L14 ANSWER 111 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1080948 CAPLUS <<LOGINID::20080627>>
DN 142:65308
ED Entered STN: 17 Dec 2004
TI Resin and chain transfer agent for photoresist composition, photoresist composition and method for forming resist pattern
IN Hada, Hideo; Takeshita, Masaru; Matsumaru, Syogo; Shimizu, Hiroaki
PA Tokyo Ohka Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM C08F220-28
ICS G03F007-039; H01L021-30
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004108780	A1	20041216	WO 2004-JP8004	20040602
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005206775	A	20050804	JP 2004-57449	20040302
	US 20070065748	A1	20070322	US 2005-557694	20051122
PRAI	JP 2003-160478	A	20030605		
	JP 2003-428853	A	20031225		
	JP 2004-57449	A	20040302		
	WO 2004-JP8004	W	20030602		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004108780	ICM	C08F220-28
	ICS	G03F007-039; H01L021-30
	IPCI	C08F0220-28 [ICM,7]; C08F0220-00 [ICM,7,C*]; G03F0007-039 [ICS,7]; H01L0021-30 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	G03F0007-033 [I,C*]; G03F0007-033 [I,A]; C08F0002-38 [I,C*]; C08F0002-38 [I,A]; C08F0220-00 [I,C*]; C08F0220-28 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]; H01L0021-30 [I,A]
	ECLA	G03F007/004D; G03F007/039C1S
JP 2005206775	IPCI	C08F0220-28 [ICM,7]; C08F0220-00 [ICM,7,C*]; C08F0002-38 [ICS,7]; G03F0007-033 [ICS,7]; G03F0007-039 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]

IPCR C08F0002-38 [I,A]; C08F0002-38 [I,C*]; C08F0220-00 [I,C*]; C08F0220-28 [I,A]; G03F0007-033 [I,A]; G03F0007-033 [I,C*]; G03F0007-039 [I,A]; G03F0007-039 [I,C*]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]; H01L0021-30 [I,A]

FTERM 2H025/AA02; 2H025/AA03; 2H025/AB16; 2H025/AC08; 2H025/AD03; 2H025/BE00; 2H025/BG00; 2H025/FA03; 2H025/FA12; 2H025/FA17; 4J011/NA25; 4J011/NB05; 4J100/AL08P; 4J100/AL08Q; 4J100/AL08R; 4J100/BA03R; 4J100/BA11P; 4J100/BA20P; 4J100/BC08P; 4J100/BC09Q; 4J100/BC09R; 4J100/BC53P; 4J100/CA04; 4J100/CA05; 4J100/CA27; 4J100/DA01; 4J100/DA36; 4J100/FA04; 4J100/JA38

US 20070065748 IPCI G03C0001-00 [I,A]

NCL 430/270.100

AB A resin for photoresist compns. is disclosed which is excellent in resoln. and line-edge roughness characteristics. A photoresist compn. and a method for forming a resist pattern using such a resin are also disclosed. The resin has a hydroxyl group bonded to a carbon atom at the end of the polymer, and the carbon atom in the .alpha.-position to the hydroxyl group has at least one electron-withdrawing group.

ST resin chain transfer agent photoresist compn

IT Chain transfer agents
Photolithography
Photoresists
(resin and chain transfer agent in photoresist compn.)

IT 756896-34-1 ***808752-25-2***
RL: TEM (Technical or engineered material use); USES (Uses)
(chain transfer agent; resin and chain transfer agent in photoresist compn.)

IT 364736-31-2P 468758-27-2P 808752-26-3P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin and chain transfer agent in photoresist compn.)

IT 144317-44-2, Triphenylsulfoniumnonafluorobutanesulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(resin and chain transfer agent in photoresist compn.)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; JP 2000321771 A 2000 CAPLUS
(2) Fuji Photo Film Co Ltd; US 6596458 B1 2000 CAPLUS
(3) Fujitsu Ltd; EP 0663616 B1 1995 CAPLUS
(4) Fujitsu Ltd; JP 07-234511 A 1995 CAPLUS
(5) Fujitsu Ltd; US 20020076645 A1 1995
(6) Fujitsu Ltd; US 6004720 A 1995 CAPLUS
(7) Fujitsu Ltd; US 6344304 B1 1995 CAPLUS
(8) Fujitsu Ltd; JP 11-012326 A 1999 CAPLUS
(9) Fujitsu Ltd; KR 250566 B1 1999
(10) Fujitsu Ltd; US 20020150834 A2 2002 CAPLUS
(11) Fujitsu Ltd; JP 2002311587 A 2002 CAPLUS
(12) Mitsubishi Rayon Co Ltd; JP 2001002735 A 2001 CAPLUS

L14 ANSWER 112 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:467964 CAPLUS <<LOGINID::20080627>>

DN 141:39455

ED Entered STN: 10 Jun 2004

TI Coloring matters absorbing near-infrared ray and filters for cutting off

near-infrared ray

IN Yamanobe, Susumu; Tamura, Masaaki; Yamaguchi, Yoji; Yamamoto, Hideo

PA Japan Carlit Co., Ltd., Japan

SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM C09B055-00
ICS C09B069-06; C09K003-00; G02B005-22

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 41, 73, 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004048480	A1	20040610	WO 2003-JP14642	20031118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003280844	A1	20040618	AU 2003-280844	20031118
	EP 1564260	A1	20050817	EP 2003-772847	20031118
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1714126	A	20051228	CN 2003-80103815	20031118
	US 20060073407	A1	20060406	US 2005-535671	20050519
PRAI	JP 2002-339110	A	20021122		
	WO 2003-JP14642	W	20031118		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004048480	ICM	C09B055-00
	ICS	C09B069-06; C09K003-00; G02B005-22
	IPCI	C09B0055-00 [ICM,7]; C09B0069-06 [ICS,7]; C09B0069-00 [ICS,7,C*]; C09K0003-00 [ICS,7]; G02B0005-22 [ICS,7]
	IPCR	C09B0055-00 [I,C*]; C09B0055-00 [I,A]; C09B0069-00 [I,C*]; C09B0069-06 [I,A]
	ECLA	C09B055/00F; C09B069/06
AU 2003280844	IPCI	C09B0055-00 [ICM,7]; C09B0069-06 [ICS,7]; C09B0069-00 [ICS,7,C*]; C09K0003-00 [ICS,7]; G02B0005-22 [ICS,7]
	IPCR	C09B0055-00 [I,C*]; C09B0055-00 [I,A]; C09B0069-00 [I,C*]; C09B0069-06 [I,A]
EP 1564260	IPCI	C09B0055-00 [ICM,7]; C09B0069-06 [ICS,7]; C09B0069-00 [ICS,7,C*]; C09K0003-00 [ICS,7]; G02B0005-22 [ICS,7]
	IPCR	C09B0055-00 [I,C*]; C09B0055-00 [I,A]; C09B0069-00 [I,C*]; C09B0069-06 [I,A]
	ECLA	C09B055/00F; C09B069/06
CN 1714126	IPCI	C09B0055-00 [ICM,7]; C09B0069-06 [ICS,7]; C09B0069-00 [ICS,7,C*]; C09K0003-00 [ICS,7]; G02B0005-22 [ICS,7]
	IPCR	C09B0055-00 [I,C*]; C09B0055-00 [I,A]; C09B0069-00 [I,C*]; C09B0069-06 [I,A]
US 20060073407	IPCI	G03C0001-76 [I,A]

IPCR G03C0001-76 [I,A]; C09B0055-00 [I,C*]; C09B0055-00 [I,A]; C09B0069-00 [I,C*]; C09B0069-06 [I,A]; G03C0001-76 [I,C]
NCL 430/270.100
ECLA C09B055/00F; C09B069/06
OS MARPAT 141:39455
GI

/ Structure 59 in file .gra /

AB Diimonium sulfonimides (I) absorb near IR, where R = alkyl group, halogenated alkyl, cyanoalkyl, aryl group, OH, Ph, phenylalkylene groups, same or different, R1 and R2 are fluoroalkyls, same or different, and fluoroalkylenes. Thus, a polymethacrylic resin film was coated with a soln. contg. Thermolac LP 45M 6, bis(trifluoromethanesulfon) imide acid N,N, N',N'-tetrakis(p-dibutylaminophenyl)-p-phenylenediimmonium 2, MEK 25, and toluene 13 parts and dried to prep. a filter.
ST near IR absorber dye filter; imonium sulfonimide near IR absorber dye
IT Dyes
Optical filters
(diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(films; diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT Onium compounds
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(iminium; diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT IR radiation
(near-IR; diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT Imides
Sulfonic acids, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sulfonimides, diimonium salts; diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT 9011-14-7, Thermolac LP 45M
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(Thermolac LP 45M; diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT 84331-53-3P 701909-18-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(diimonium sulfonimides absorbing near-IR ray and filters for cutting off near-IR ray)
IT 536741-75-0P 700876-21-7P 700876-23-9P 700876-25-1P
700876-26-2P ***700876-27-3P*** 701909-20-8P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material

```
     use); PREP (Preparation); USES (Uses)
        (diimonium sulfonimides absorbing near-IR ray and filters for cutting
        off near-IR ray)
IT   620-05-3, Benzyl iodide   3283-07-6, N,N, N',N'-Tetrakis(p-aminophenyl)-p-
     phenylenediamine   3831-29-6, 4-Fluorobenzyl iodide   4182-80-3, N,N,
     N',N'-Tetrakis(p-dibutylaminophenyl)-p-phenylenediamine   17376-04-4,
     Phenethyl iodide   20667-12-3, Silver oxide   84246-29-7   189114-61-2
     701304-85-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (diimonium sulfonimides absorbing near-IR ray and filters for cutting
        off near-IR ray)
RE.CNT  1     THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Nippon Kayaku Co Ltd; JP 10-180922 A 1998 CAPLUS

L14  ANSWER 113 OF 116  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2004:413041  CAPLUS <<LOGINID::20080627>>
DN   140:409404
ED   Entered STN:  21 May 2004
TI   Functional fluid compositions containing erosion inhibitors
IN   Silverman, David C.; Hirzel, Timothy K.
PA   Solutia Inc., USA
SO   PCT Int. Appl., 86 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  C10M169-04
CC   51-8 (Fossil Fuels, Derivatives, and Related Products)
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   WO 2004041978       A1     20040521    WO 2003-US35082        20031104
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2504891           A1     20040521    CA 2003-2504891        20031104
     AU 2003287507        A1     20040607    AU 2003-287507         20031104
     AU 2003287507        B2     20080501
     US 20050056809       A1     20050317    US 2003-700395         20031104
     US 7255808           B2     20070814
     EP 1558716           A1     20050803    EP 2003-781748         20031104
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003015915        A      20050920    BR 2003-15915          20031104
     JP 2006505654        T      20060216    JP 2004-550457         20031104
     MX 2005PA04801       A      20050819    MX 2005-PA4801         20050504
PRAI US 2002-423564P      P      20021104
     WO 2003-US35082      W      20031104
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
```

WO 2004041978	ICM	C10M169-04
	IPCI	C10M0169-04 [ICM,7]; C10M0169-00 [ICM,7,C*]
	IPCR	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
	ECLA	C10M169/04; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10N; M10N; M10N; M10N
CA 2504891	IPCI	C10M0169-04 [ICM,7]; C10M0169-00 [ICM,7,C*]
	IPCR	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
	ECLA	C10M169/04
AU 2003287507	IPCI	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
	IPCR	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
	ECLA	C10M169/04; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10N; M10N; M10N; M10N
US 20050056809	IPCI	C09K0005-00 [I,A]; C10M0105-74 [I,A]; C10M0105-00 [I,C*]
	IPCR	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
	NCL	252/073.000; 252/078.500; 252/074.000; 252/075.000; 252/076.000
	ECLA	C10M169/04; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10M; M10N
EP 1558716	IPCI	C10M0169-04 [ICM,7]; C10M0169-00 [ICM,7,C*]
	IPCR	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
	ECLA	C10M169/04
BR 2003015915	IPCI	C10M0169-04 [ICM,7]; C10M0169-00 [ICM,7,C*]
	IPCR	C10M0169-00 [I,C*]; C10M0169-04 [I,A]
JP 2006505654	IPCI	C10M0169-04 [I,A]; C10M0169-00 [I,C*]; C10M0105-74 [I,A]; C10M0105-00 [I,C*]; C10M0131-02 [I,A]; C10M0131-00 [I,C*]; C10M0133-16 [I,A]; C10M0133-22 [I,A]; C10M0133-00 [I,C*]; C10M0135-00 [I,A]; C10M0135-08 [I,A]; C10M0135-10 [I,A]; C10M0135-34 [I,A]; C10M0135-36 [I,A]; C10M0137-08 [I,A]; C10M0137-12 [I,A]; C10M0137-16 [I,A]; C10M0137-00 [I,C*]; C23F0011-14 [I,A]; C23F0011-10 [I,C*]
	IPCR	C10M0169-00 [I,C]; C10M0169-04 [I,A]; C10M0105-00 [I,C]; C10M0105-74 [I,A]; C10M0131-00 [I,C]; C10M0131-02 [I,A]; C10M0133-00 [I,C]; C10M0133-16 [I,A]; C10M0133-22 [I,A]; C10M0135-00 [I,C]; C10M0135-00 [I,A]; C10M0135-08 [I,A]; C10M0135-10 [I,A]; C10M0135-34 [I,A]; C10M0135-36 [I,A]; C10M0137-00 [I,C]; C10M0137-08 [I,A]; C10M0137-12 [I,A]; C10M0137-16 [I,A]; C10N0030-12 [N,A]; C10N0040-08 [N,A]; C23F0011-10 [I,C]; C23F0011-14 [I,A]
	FTERM	4H104/BD01C; 4H104/BE11C; 4H104/BE16C; 4H104/BG06C; 4H104/BG18C; 4H104/BG19C; 4H104/BG20C; 4H104/BH03A; 4H104/BH05C; 4H104/BH11C; 4H104/LA06; 4H104/PA05; 4K062/AA03; 4K062/BB09; 4K062/BB14; 4K062/BB18; 4K062/FA20
MX 2005PA04801	IPCI	C10M0169-04 [ICM,7]; C10M0169-00 [ICM,7,C*]

OS MARPAT 140:409404

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/ Structure 60 in file .gra /

AB Erosion-resistant phosphate ester-based functional fluids and hydraulic fluids contain, in addn. to the phosphate ester basestock, perfluorohydrocarbyl-type erosion inhibitor additives of general structures [Rf-Y(:A)-X--Z]nMn+ and I, in which Rf is fluoroalkyl, fluoroaryl, fluoroaralkyl, fluoroalkaryl, fluorocycloalkyl, fluoroalkoxyalkyl, or fluoropolyalkoxyalkyl; Y and Y' are -C-, -S-, -S(:A)-, -P-Rf, -P-OR, -P-NRR'; A and A' are O or NR; X = N or CR''; Z is Y;(:A)-Rf, H, -OC(:O)-Rf, R1-NH-SO2-Rf; R and R' are H, alkyl, fluoroalkyl, aryl, fluoroaryl, alkaryl, aralkyl, fluoroalkaryl, fluoroaralkyl; R'' is H, alkyl, fluoroalkyl, aryl, fluoroaryl, alkaryl, aralkyl, fluoroalkaryl, fluoroaralkyl, or -Y(:A)-R2; R2 is alkyl, fluoroalkyl, aryl, fluoroalkyl, alkaryl, aralkyl, fluoroalkaryl, or fluoroaralkyl; R1 is unsubstituted or fluoro-substituted alkylene, cycloalkylene, alkarylene, aralkylene or arylene; Rf3 is fluoroalkylene, fluoroarylene, fluoroaralkylene, fluoroalkarylene, fluoroalkoxyalkylene, or fluoropolyalkoxyalkylene; M is a cation of valence n; and n = 1-4. The functional fluids are particularly useful as aviation hydraulic fluids.

ST aviation hydraulic fluid erosion antiwear inhibitor; perfluoroalkyl imide antiwear erosion inhibitor functional fluid; sulfonamide erosion inhibitor hydraulic fluid; sulfonamidate erosion inhibitor hydraulic fluid

IT Hydraulic fluids
(aviation; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)

IT Sulfonamides
RL: MOA (Modifier or additive use); USES (Uses)
(fluoroalkyl; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)

IT Onium compounds
RL: MOA (Modifier or additive use); USES (Uses)
(imidazolium compds., salts with perfluoroalkyl sulfonimides and sulfonamides; antiwear agents-erosion inhibitors; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)

IT Erosion (wear)
Hydraulic fluids
(perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)

IT Erosion (wear)
(resistance; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)

IT Alkali metal compounds
Alkaline earth compounds
Group IB element compounds
Group IIB element compounds
Group IIIA element compounds
Group IVA element compounds
Group VA element compounds
Group VIA element compounds
Group VIII element compounds
Halogen compounds
Phosphonium compounds
Quaternary ammonium compounds, uses
RL: MOA (Modifier or additive use); USES (Uses)
(salts with perfluoroalkyl sulfonimides and sulfonamides; antiwear agents-erosion inhibitors; perfluoroalkyl-type antiwear agents-erosion

inhibitors for phosphate ester-based functional fluids)
IT Imides
Sulfonic acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(sulfonimides, fluoroalkyl; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)
IT 7664-38-2D, Phosphoric acid, esters
RL: TEM (Technical or engineered material use); USES (Uses)
(base oils; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)
IT 22466-51-9 90076-63-4 90076-65-6 90076-67-8 119229-98-0
119229-99-1 129135-87-1 129318-47-4 132843-44-8 133395-16-1
151582-16-0 155812-81-0 161401-25-8 161580-41-2 165324-09-4
168106-26-1 189217-62-7 192888-05-4 210230-40-3 221203-22-1
497221-16-6 497221-23-5 502460-01-7 507474-04-6 547718-93-4
689282-07-3 689282-08-4 689282-09-5 689282-11-9 689282-12-0
689282-13-1 689282-19-7 689282-20-0 689282-21-1 689282-22-2
689282-23-3 689282-24-4 689282-25-5 689282-27-7 689282-28-8
689282-29-9 689282-30-2 689282-31-3 689282-32-4 689282-33-5
689282-34-6 689282-35-7 689282-36-8 689282-37-9 689282-38-0
689282-39-1 689282-40-4 689282-41-5 689282-42-6 689282-43-7
689282-44-8 689282-45-9 689282-46-0 689282-47-1 689282-48-2
689282-49-3 689282-51-7 689282-52-8 689282-53-9 689282-54-0
689282-55-1 689282-56-2 689282-57-3 689282-58-4 689282-60-8
689282-61-9 689282-62-0 689282-63-1 689282-64-2 689282-65-3
689282-66-4 ***689282-67-5*** ***689282-68-6***
689282-69-7 689282-70-0 689282-71-1 689282-72-2
689282-74-4 689282-75-5 689282-76-6 689282-77-7 689282-78-8
689282-79-9 689282-80-2 689282-81-3 689288-10-6
RL: MOA (Modifier or additive use); USES (Uses)
(erosion inhibitor; perfluoroalkyl-type antiwear agents-erosion inhibitors for phosphate ester-based functional fluids)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Abernathy, S; WO 9617517 A 1996 CAPLUS
(2) Japan Science & Tech Corp; EP 1344772 A 2003 CAPLUS
(3) Karl-Heinz, M; US 4370254 A 1983 CAPLUS
(4) Koshar, R; US 4387222 A 1983 CAPLUS

L14 ANSWER 114 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:853325 CAPLUS <<LOGINID::20080627>>
DN 139:356048
ED Entered STN: 31 Oct 2003
TI Positive-working photoresist composition
IN Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-039
ICS C08F012-14; C08F016-22; C08F020-22; C08F020-26; C08F032-04; G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	JP 2003307850	A	20031031	JP 2002-112257	20020415
PRAI	JP 2002-112257		20020415		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003307850	ICM	G03F007-039
	ICS	C08F012-14; C08F016-22; C08F020-22; C08F020-26; C08F032-04; G03F007-004; H01L021-027
	IPCI	G03F0007-039 [ICM,7]; C08F0012-14 [ICS,7]; C08F0012-00 [ICS,7,C*]; C08F0016-22 [ICS,7]; C08F0016-00 [ICS,7,C*]; C08F0020-22 [ICS,7]; C08F0020-26 [ICS,7]; C08F0020-00 [ICS,7,C*]; C08F0032-04 [ICS,7]; C08F0032-00 [ICS,7,C*]; G03F0007-004 [ICS,7]; H01L0021-027 [ICS,7]; H01L0021-02 [ICS,7,C*]
	IPCR	G03F0007-039 [I,C*]; G03F0007-039 [I,A]; C08F0012-00 [I,C*]; C08F0012-14 [I,A]; C08F0016-00 [I,C*]; C08F0016-22 [I,A]; C08F0020-00 [I,C*]; C08F0020-22 [I,A]; C08F0020-26 [I,A]; C08F0032-00 [I,C*]; C08F0032-04 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]

OS MARPAT 139:356048

GI

/ Structure 61 in file .gra /

AB The title compn. contains a photoacid generator, a resin increasing the soly. in an alkali developer by an acid, and a solvent, wherein the acid generator has general structure (R1)(R2)(R3)S+ X- or R4-I+-R5 X- (R1-5 = aliph. hydrocarbon, arom. hydrocarbon; X = anion) and wherein the resin contains at least one of repeating unit chosen from I, II,(m = 0,1; X = H, acid-sensitive group; R11-16 = H, F, fluoroalkyl; R3a = H, acid-sensitive group), [-CH2-C(CF3)(CO2R14)-] (R4a = H, acid-sensitive group), etc. The compn. is suitable for exposure of .ltoreq.160 nm light and provides photoresist of good line-edge roughness and little residual layer after the development.

ST pos working photoresist compn

IT Positive photoresists
(pos.-working photoresist compn.)

IT 393110-05-9 460731-17-3 460731-18-4 460731-19-5 460731-20-8
460731-21-9 460731-23-1 460731-25-3 460731-26-4 460731-27-5
460731-28-6 460731-29-7 460731-32-2 476315-57-8 476315-59-0
476315-60-3 476315-64-7 476315-65-8 476315-66-9
476315-67-0 618097-09-9 618097-11-3 618097-12-4
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator in compn.)

IT 143336-94-1 370102-83-3 370866-39-0 406702-00-9 430437-18-6
459418-30-5 607710-65-6 607710-66-7 607710-67-8 607710-68-9
607710-69-0 607710-70-3 607710-71-4 607710-72-5 607710-73-6
607710-76-9 607710-77-0 607710-78-1 610300-97-5 610300-98-6
610301-00-3 610301-03-6
RL: TEM (Technical or engineered material use); USES (Uses)
(resin in compn.)

IT 96-48-0, .gamma.-Butyrolactone 105-37-3 141-78-6, Ethyl acetate, uses
1320-67-8, Propylene glycol monomethyl ether 84540-57-8, Propylene
glycol monomethyl ether acetate
RL: NUU (Other use, unclassified); USES (Uses)
(solvent in compn.)

L14 ANSWER 115 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:904532 CAPLUS <<LOGINID::20080627>>
DN 137:391087
ED Entered STN: 29 Nov 2002
TI Positive-working photoresist compositions containing specific resin and
specific acid-generator
IN Sato, Kenichiro; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 105 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-039
ICS C08F220-10; C08F232-00; C08F234-00; C08K005-16; C08K005-34;
C08K005-36; C08L033-04; C08L045-00; G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002341539	A	20021127	JP 2001-149620	20010518
	JP 4067284	B2	20080326		
	US 20030008241	A1	20030109	US 2002-93411	20020311
	US 6777160	B2	20040817		
	TW 538317	B	20030621	TW 2002-91104604	20020312
	KR 773045	B1	20071102	KR 2002-13339	20020312
PRAI	JP 2001-68849	A	20010312		
	JP 2001-68850	A	20010312		
	JP 2001-149620	A	20010518		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002341539	ICM	G03F007-039
	ICS	C08F220-10; C08F232-00; C08F234-00; C08K005-16; C08K005-34; C08K005-36; C08L033-04; C08L045-00; G03F007-004; H01L021-027
	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]; C08F0220-10 [I,A]; C08F0220-00 [I,C*]; C08F0232-00 [I,A]; C08F0234-00 [I,A]; C08K0005-16 [I,A]; C08K0005-34 [I,A]; C08K0005-36 [I,A]; C08K0005-00 [I,C*]; C08L0033-04 [I,A]; C08L0033-00 [I,C*]; C08L0045-00 [I,A]; H01L0021-027 [I,A]; H01L0021-02 [I,C*]
	IPCR	G03F0007-039 [I,C*]; G03F0007-039 [I,A]; C08F0220-00 [I,C*]; C08F0220-10 [I,A]; C08F0232-00 [I,C*]; C08F0232-00 [I,A]; C08F0234-00 [I,C*]; C08F0234-00 [I,A]; C08K0005-00 [I,C*]; C08K0005-16 [I,A]; C08K0005-34 [I,A]; C08K0005-36 [I,A]; C08L0033-00 [I,C*]; C08L0033-04 [I,A]; C08L0045-00 [I,C*]; C08L0045-00 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; H01L0021-02 [I,C*]; H01L0021-027 [I,A]
US 20030008241	IPCI	G03F0007-039 [ICM,7]

	IPCR	G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]
	NCL	430/287.100; 430/270.100; 430/286.100; 430/914.000; 430/919.000; 430/920.000; 430/921.000; 430/945.000; 522/904.000; 430/905.000; 522/031.000
	ECLA	G03F007/004D; G03F007/039C1; G03F007/039C1S
TW 538317	IPCI	G03F0007-039 [ICM,7]
	IPCR	G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-039 [I,C*]; G03F0007-039 [I,A]
KR 773045	IPCI	G03F0007-039 [I,A]

GI

/ Structure 62 in file .gra /

AB The title compn. contains a resin increasing the soly. towards an alkali developer by reacting with an acid and actinic ray- or radiation-sensitive acid-generator, wherein the resin has repeating unit I(R11'-12' = H, cyano, halo, alkyl; Z' = alicyclic residue), repeating unit II (Z2 = -O-, -N(R41)-; R41 = H, OH, alkyl, etc.), and [CH2-C(R91)(-CO-X-Q-R92)] (R91= H, lower alkyl, halo, CN; X5 = -O-, -S-, -NR93-, -NR93SO2-; R93 = H, alkyl; Q = single bond, connecting group) and wherein the acid-generator has structure (R1)(R2)(R3)S+ X- or R4-I+-R5 X- (R1-5 = aliph. hydrocarbon, arom. hydrocarbon; X- = R6-SO2-N--SO2=R7, R8-SO2-C-(SO2-R10)-SO2-R9; R6-10 = aliph. hydrocarbon). The compn. provides the photoresist of the high resoln. and the wide margin for the exposure conditions for.

ST pos working photoresist compn

IT Light-sensitive materials
(pos.-working photoresist compns.)

IT Photolithography
(submicron; pos.-working photoresist compns.)

IT 393110-05-9 460731-17-3 460731-18-4 460731-19-5 460731-20-8
460731-21-9 460731-23-1 460731-25-3 460731-26-4 460731-28-6
460731-29-7 476315-55-6 476315-57-8 476315-59-0 ***476315-60-3***
476315-62-5 476315-64-7 476315-65-8 476315-66-9 476315-67-0
476315-68-1 476315-69-2 476315-71-6
RL: TEM (Technical or engineered material use); USES (Uses)
(acid-generator; pos.-working photoresist compns.)

IT 71-43-2, Benzene, reactions 945-51-7, Diphenylsulfoxide 2049-95-8, tert-Amylbenzene 7664-93-9, Sulfuric acid, reactions 7758-05-6, Potassium iodate 12027-06-4, Ammonium iodide 325146-84-7, Iodonium,bis[(1,1-dimethylpropyl)phenyl]-
RL: RCT (Reactant); RACT (Reactant or reagent)
(pos.-working photoresist compns.)

IT 391232-36-3P 391613-77-7P 398140-77-7P 398140-78-8P 398140-79-9P
398140-80-2P 398140-81-3P 398140-82-4P 398140-84-6P 398140-86-8P
398140-87-9P 398140-88-0P 398140-89-1P 398140-90-4P 398140-91-5P
398140-92-6P 398140-93-7P 398140-94-8P 398140-95-9P 398140-97-1P
398140-98-2P 398140-99-3P 398141-00-9P 398141-04-3P 398141-06-5P
398141-07-6P 398141-08-7P 398141-10-1P 398141-11-2P 398141-13-4P
398141-14-5P 398141-16-7P 398152-52-8P 405509-25-3P 405509-29-7P
405509-30-0P 406722-63-2P 476315-53-4P 476315-54-5P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)
(resin; pos.-working photoresist compns.)

L14 ANSWER 116 OF 116 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1993:124501 CAPLUS <<LOGINID::20080627>>
DN 118:124501
OREF 118:21585a,21588a
ED Entered STN: 30 Mar 1993
TI Synthesis and decomposition of benzenediazonium tris((trifluoromethyl)sulfonyl)methanide, C6H5N2+(CF3SO2)3C- and benzenediazonium bis((trifluoromethyl)sulfonyl)amide C6H5N2+(CF3SO2)2N- and the cyclic analog, C6H5N2+ cyclo-SO2(CF2)3SO2N-
AU Zhu, Shi Zheng; DesMarteau, D. D.
CS H. L. Hunter Chem. Lab., Clemson Univ., Clemson, SC, 29634-1905, USA
SO Inorganic Chemistry (1993), 32(2), 223-6
CODEN: INOCAJ; ISSN: 0020-1669
DT Journal
LA English
CC 28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 23
GI

/ Structure 63 in file .gra /

AB Phenyltris[(trifluoromethyl)sulfonyl]methane, (CF3SO2)3CC6H5, and its isomeric ester (CF3SO2)2C:S(O)(CF3)OC6H5 are formed by the thermal decompn. of benzenediazonium tris[(trifluoromethyl)sulfonyl]methanide, PhN2+C(SO2CF3)3-, which was prepd. by treatment of (CF3SO2)3CH, with PhN2+Cl-. Similarly, pyrolysis of PhN2+(CF3SO2)2N-, and the cyclic analog I, prepd. analogously from the corresponding sulfonimides, yields the N-Ph and O-Ph isomers (CF3SO2)2NPh, CF3SO2N:S(O)(CF3)OPh, II, and III, resp.
ST benzenediazonium tristrifluoromethylsulfonylmethanide prepn decompn; bistrifluoromethylsulfonylamide benzenediazonium prepn decompn; decompn benzenediazonium bistrifluoromethylsulfonylamide tristrifluoromethylsulfonylmethanide dithiazine dioxide
IT Decomposition
(of benzenediazonium tris[(trifluoromethyl)sulfonylmethanide and bis[(trifluoromethyl)sulfonyl]amide and cyclic analog)
IT 84246-29-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling of, with benzenediazonium chloride)
IT 62-53-3, Aniline, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(diazotization and reaction of, with tris[(trifluoromethyl)sulfonyl]methane)
IT 130447-46-0P 142183-68-4P 146063-74-3P ***146063-78-7P***
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and decompn. of)
IT 36035-54-8P 37595-74-7P 75850-60-1P 142143-83-7P 146063-72-1P 146063-75-4P 146063-76-5P 146063-79-8P 146063-80-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 60805-12-1
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with benzenediazonium chloride)
IT 82113-65-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with benzenediazonium chlorides)
IT 100-34-5 1073-71-8 20893-71-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with bis[(trifluoromethyl)sulfonyl]amide)

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